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The Relative Effects of Salespersons' Ratings on Ability and Effort Criteria.

Sandra Edwards Mckay
Louisiana State University and Agricultural & Mechanical College

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McKay, Sandra Edwards, Ph.D.

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U·M·I
300 N. Zeeb Rd.
Ann Arbor, MI 48106

THE RELATIVE EFFECTS OF SALESPERSONS' RATINGS ON ABILITY AND EFFORT CRITERIA

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Sandra Edwards McKay
B.S., Northeast Louisiana University, 1962
M.Ed., Northeast Louisiana University, 1965
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ABSTRACT

Performance appraisal is a crucial function of sales managers. Often, performance appraisal information is used as a basis for decisions relating to pay, promotion, and termination. Such decisions can have a substantial impact on the motivation, satisfaction, and productivity of members of the sales force. Despite its importance, little research has investigated the way in which decisions concerning salesperson performance are made. The primary goal of this research was to examine the relative effects of salespeople's ability and effort on decisions relating to promotion, compensation, transfer, and termination. A secondary purpose was to see if salesperson sex influenced these decisions.

A sample of 256 subjects participated in the study. In a role playing situation, subjects' responses suggested that a salesperson's ratings on ability and effort criteria play a significant role in determining actions concerning salesperson performance. The results indicated that when a salesperson's performance was characterized as below average, the most coercive actions, including termination, were more likely to be taken when the salesperson was rated low on effort

criteria rather than ability criteria. When making decisions concerning good performance, however, subjects were more likely to promote and to transfer to a better territory those salespeople who performed well on ability criteria rather than on effort criteria.

There was some evidence of differential treatment of male and female salespeople. Males were more likely to be punished for poor performance but were more likely to be promoted for good performance than were females. The results suggest, however, that ratings on ability and effort performance dimensions have a greater influence on reactions to salesperson performance than salesperson sex.

CHAPTER I

DESCRIPTION OF THE RESEARCH TOPIC

Introduction to the Problem Area

Performance appraisal is one of the sales manager's most important functions. It is the process by which the sales manager monitors and appraises the performance of members of the sales force. Performance evaluation provides feedback to the salesperson, identifying behaviors that need to be changed or modified in order to adjust behaviors to meet performance expectations (Kearney, 1976). Furthermore, data obtained in performance appraisal serve as a basis for decisions relating to pay, advancement, transfer, and retention. The sales manager, depending on how evaluation information is used, has the potential to positively or negatively affect salesperson satisfaction, motivation, and subsequent job performance.

Despite the importance of performance appraisal, sales force evaluation has not generated a great deal of research interest. To a large extent, the existing sales management literature has been descriptive or normative regarding evaluation. Previous research has focused primarily on developing procedures or methods for evaluating salespeople or on describing evaluation practices (e.g., Cocanougher and Ivancevich, 1978; Jackson, Keith and Schlacter, 1983). But, the way in which sales managers use evaluation information in making decisions concerning sales force members has received little attention.

The next section presents a discussion of the need for and relevance of the research study. The section includes a statement of the purpose and a discussion of the significance and expected contributions of the research study.

Statement of Need for and Relevance of Research on the Topic

Traditionally, research on performance appraisal has focused on the effect that various aspects of appraisal have on salespeople's attitudes and performance. For example, the effects of performance feedback (e.g., Tyagi, 1985b; Teas, Wacker and Hughes, 1979) and of salesperson participation in the evaluation process (e.g., Walker, Churchill and Ford, 1975; Behrman and Perreault, 1984) on salesperson performance and satisfaction have received considerable research attention.

Although the information processing of sales managers has not received a great deal of research attention, some recent research has focused on the cognitive processes of the sales manager and how they impact evaluations of salespeople (e.g., Patton and King, 1985; Mowen, Fabes, and LaForge, 1986). The present study focused on the information processing activities of the sales manager and how they influence sales force evaluations.

Salespeople's evaluations are typically based on a set of multiple job-related performance dimensions. The dimensions reflect job-related abilities (e.g., product knowledge, selling skills, planning activity), job-related efforts (e.g., number of calls made, amount of time spent preparing for calls), job-related traits (e.g., appearance, enthusiasm), and/or the salesperson's results for the evaluation period (e.g., sales volume in dollars, sales volume as a percentage of quota).

The set of dimensions used to evaluate salesperson performance typically derive from and are related to factors impacting salesperson job performance. For jobs where there is a time lapse between behaviors and the achievement of results, such as many industrial sales jobs, salespeople usually are evaluated, not only on results, such as sales volume, but also on input factors, such as product knowledge or number of sales calls. Such input factors are indicative of salesperson job-related ability and salesperson job-related effort. In addition, these are factors over which the salesperson has control and can be changed, and they directly impact the long-run achievement of desired results.

There are instances in the marketing literature in which salesperson evaluation is based solely on input factors. For example, in a study of sales supervisors of pharmaceutical salespeople, neither the supervisors from whom information was collected nor the authors of the research used sales data in evaluating salespeople (Futrell and Parasuraman, 1984). Instead, such attributes as attitude, "hard work," and product knowledge were used as evaluative criteria.

After the set of dimensions has been selected for use in the evaluation process, the sales manager assesses each salesperson along each dimension using either rating scales, check-off lists, narratives, or some other quantitative or qualitative techniques. The set of ratings are then summarized in some manner resulting in an overall performance score for each salesperson.

Often the resulting evaluations are used as a basis for making promotion, compensation, transfer and termination decisions. In these situations, the sales manager may base his decisions on salespeople's ratings on particular performance dimensions rather than on their

overall performance scores. For example, salespersons' ratings on product knowledge (an ability-related dimension) may be the key criterion when deciding who to promote, but receive little emphasis when allocating bonuses. Or, the sales manager may react more punitively toward salespeople who were rated low on number of sales calls made (an effort-related dimension) than those who were rated low on other performance dimensions.

Research in the marketing literature has, for the most part, neglected the impact of job-related ability on salesperson performance. Notable exceptions are the recent work of Weitz, Sujan, and Sujan (1986) and Sujan (1986), who focused on one aspect of salesperson ability - adaptive selling - which they referred to as "working smarter." They suggested that salespeople's level of ability (working smarter), perhaps to an even greater extent than their level of effort (working harder), has an important bearing on their performance (Sujan, 1986, p. 48). The possibility that salespeople's ratings on job-related ability and job-related effort dimensions may differentially affect a sales manager's decisions concerning members of the sales force has received little research attention.

In addition to the influence of a salesperson's ratings on particular performance dimensions, the sales manager's decision making process may be influenced by other factors. Previous research in organizational behavior and social psychology suggests that the sex of a subordinate affects a manager's information processing activities. For example, studies have found that sex differences influence a manager's choice of job applicants (e.g., Rosen and Jerdee, 1974; Dipboye, Fromkin, and Wiback, 1975; Haefner, 1977), performance evaluations (e.g., Jacobson and Effertz, 1975; Bigonness, 1976;

Abramson, Goldberg, Greenberg, and Abramson, 1978), ratings of subordinates on such dimensions as likability, acceptability, integrity, and longevity (e.g., Rosen, Jerdee, and Prestwich, 1975; Gutek and Steven, 1979), and the allocation of rewards and sanctions (e.g., Dipboye, Arvey and Terpstra, 1978; Terborg and Ilgen, 1975; Taynor and Deaux, 1975). The influence of gender on human judgment processes has been particularly evident in situations that are traditionally considered predominately masculine domains and that require relatively high levels of skill--for example, managerial positions (e.g., Rosen and Jerdee, 1974; Cash and Kilcullen, 1975), attorneys (e.g., Abramson et.al., 1978), college professors (e.g., Fidell, 1970), and engineers or scientists (e.g., Shaw, 1975).

The lack of research in the sales management literature investigating the effects of salesperson sex on a sales manager's information processes is understandable given the small number of women in professional sales jobs in the past. For example, in 1970, females comprised only 6.6% of the total commodities sales representatives (U.S. Bureau of Census, 1984).

There has been a significant increase, however, in the percentage of women in professional sales in the last decade. In 1980, the percentage of women had reached 14.5%, representing a percentage increase of 119.7 (Gable and Reed, 1987). The increasing number of women moving into industrial sales positions has generated some research interest in the sales management literature. Research on salesperson sex has focused on comparisons of male and female salespersons' perceptions along such dimensions as job satisfaction, reward desirability, and role clarity (e.g., Busch and Bush, 1978; Swan, Futrell, and Todd, 1978; Gibson and Swan, 1981-82) and on

customer acceptance of female salespeople (e.g., Swan, Rink, Kiser, and Martin, 1984; Lundstrom and Ashworth, 1983). These studies made a valuable contribution to the understanding of sex differences because of the importance of self-perceptions on occupational behavior and the importance of customer acceptance for sales success.

The increasing movement of women into professional sales and the research evidence indicating that managers' information processes are influenced by subordinate sex, particularly in masculine occupations such as industrial sales, appear to increase the importance of obtaining an understanding of the effects of salesperson sex on sales managers' performance appraisals. A search of the sales management literature found only one study (Futrell, 1984) designed to investigate the influence of sex differences on evaluations. Futrell's study was designed to examine salespeople's ratings of male versus female sales managers on the effectiveness of and satisfaction with their leadership styles. Not one study was found examining the effects of sex on promotion, compensation, transfer or termination decisions regarding salespeople.

Purpose of the Research Study

The way in which sales managers make decisions about performance has a substantial impact on the effectiveness of the marketing function, yet little research has examined such decisions (Johnson and Shields, 1983). The present research study was designed to help fill this gap by investigating how sales managers make decisions. Specifically, the purposes of the research were: (1) To examine the relative influence of salespeople's job-related ability and job-related

effort on decisions relating to promotion, compensation, transfer, and termination; and (2) To investigate the effects of salesperson sex on these decisions.

Significance of the Research and Expected Contributions

An understanding of sales managers' decision making processes has several implications for the effective management of members of the sales force and for sales force researchers. First, awareness of which performance dimensions influence decisions relating to promotions, compensation, transfer, and termination should lead to a clearer understanding of performance expectations and a more definitive specification of the relationship between performance and rewards. This should enable salespeople to work more effectively toward the achievement of desired rewards and strengthen salespeople's perceptions that rewards are based on performance. In addition, it should enhance the sales manager's ability to explain and defend decisions to the sales force, reducing potential misunderstandings and perceptions of inequities.

Second, a comparison of the effects of job-related ability and job-related effort will aid in the understanding of how these two components of salesperson performance impact management decisions. To a large extent, job-related ability has been overlooked in sales force research, even though it is an important determinant of success and should be recognized, rewarded and used effectively. Finding that high priority is placed on ability in management decisions may indicate a new direction for researchers investigating salesperson productivity.

Finally, despite the increasing number of females among the ranks of professional salespeople, the sales management literature contains no information pertaining to how female salespersons are treated in terms of rewards and sanctions. Knowledge of the influence of salesperson sex on managerial decisions should be of some importance to sales managers, if for no other reason, due to the scrutiny of the governmental agencies overseeing personnel practices. There are, however, more important reasons for understanding the effects of salesperson sex on sales managers' decision making processes. Differential allocation of rewards, unless justifiably based on differences in performance levels, is clearly detrimental to the sales organization. Vroom (1964) has suggested that "the importance of a given level of wages to a worker is dependent not only on its amount but on the extent to which it is believed to be fair or equitable" (p. 260). Perceived inequities in the allocation of rewards and sanctions tend to reduce the importance attached to those rewards and the propensity to work toward the achievement of those rewards (Tyagi, 1985a). Thus, management, through inequitable reward distribution, loses or reduces the value of an important source of control over salespeople. The direction of preference, whether toward males or females, is much less important than whether a preference exists.

An effective performance appraisal system informs members of the sales force about performance criteria, procedures, and objectives. It may be just as important to inform salespeople about the way evaluation information is used in reaching decisions concerning salespeople. Not understanding the relative importance of performance dimensions and of the effects of salesperson sex on advancement, pay, transfer, and

retention decisions may well result in problems of role ambiguity and dissatisfaction as well as adversely affecting salesperson performance.

Organization of Dissertation

Chapter 1 served to acquaint the reader with an overview of the research topic. The lack of research on sales managers' decision making processes was identified as a major gap in the sales management literature. In addition, the purposes of the research study were delineated. Finally, the significance and expected contributions of the study were discussed.

Chapter 2 contains a review of the literature. The review is presented in several sections. Research on salesperson performance is first presented followed by a review of sales force evaluation studies. The final sections of Chapter 2 contain reviews of research on sex differences in sales jobs and related research from the organizational behavior literature.

Chapter 3 presents a conceptual framework for studying the impact of evaluative criteria on evaluators' cognitive processes. The research hypotheses and methodology are also presented in Chapter 3. Chapter 4 contains analyses of the data and Chapter 5 presents a discussion of the research conclusions and implications.

CHAPTER II

REVIEW OF RELEVANT LITERATURE

Introduction

This chapter is divided into four sections. The first section contains a review of research on salesperson performance. The review of this research focuses on studies that examined the impact of salesperson characteristics on salesperson performance, studies that used the degree of match between salesperson and customer characteristics to predict performance outcome, studies that investigated the impact of role perceptions on salesperson satisfaction and performance, and studies that examined the relationship between supervisory behaviors and role perceptions. This section concludes with a discussion of the research findings.

The second section presents a review of the sales force evaluation research in the sales management literature. The review of this literature is divided into three subsections consisting of: (1) research on evaluative methods, (2) research on evaluation practices, and (3) research on evaluative decisions. The section concludes with a discussion of the conceptual and methodological implications of the sales force evaluation research for this study.

In the third section, research on sex differences in sales jobs is reviewed. The review is divided into subsections which present research on sex differences in salesperson's perceptions, research on

sex differences in customer perceptions, and research on sex differences in evaluation processes. The research findings are then discussed. Finally, a brief review of related research in the organizational behavior literature will be presented.

Research on Salesperson Performance

Much of the research on salesperson performance has focused on the relationship between salesperson characteristics and performance level. These studies have relied heavily on physical traits (such as age and height), personal experience data (such as education and sales experience), and personality characteristics (such as ego-drive and empathy) in studying salesperson performance. The results of studies that have considered these characteristics related to sales performance are summarized in Table 1.

The data presented in Table 1 indicate that these characteristics are inconsistently related to performance. For example, both age and education were significant in three studies and insignificant in six. Eight studies found characteristics such as ego-drive and dominance significantly related to performance while four studies did not find a significant relationship between these characteristics and performance. In addition, as seen in Table 1, the findings regarding characteristics such as social intelligence and social adaptability are also inconsistent.

Methodological considerations may account for some of the inconsistencies across studies. A variety of methods have been used to

TABLE 1

Summary of Studies on Salesperson Characteristics

Significantly Related to Performance	Not Significantly Related to Performance
Age	
Kirchner et.al. 1960 (industrial) Mosel 1952 (retail) Weaver 1969 (retail)	Cotham 1969 (retail) Ghiselli 1969 (stockbroker) Tanofsky et.al. 1969 (life insurance) Meranda & Clarke 1959 (life insurance) Lamont & Lundstrom 1977 (industrial) French 1960 (retail)
Education	
Meranda & Clarke 1959 (life insurance) Mosel 1952 (retail) Weaver 1969 (retail)	Baehr & Williams 1968 (specialty food) Tanofsky et.al. 1969 (life insurance) Lamont & Lundstrom 1977 (industrial) Ghiselli 1969 (stockbroker) Cotham 1969 (retail) French 1960 (retail)
Sales Related Knowledge Sales Experience, Training, Product Knowledge	
Baier & Duggan 1957 (life insurance)	Tanofsky et.al. 1969 (life insurance) Meranda & Clarke 1959 (life insurance) Baehr & Williams 1968 (specialty food) Cotham 1969 (retail) Ghiselli 1969 (stockbroker) French 1960 (retail)

Table 1 (continued)

Significantly Related to Performance	Not Significantly Related to Performance
Dominance, Ego-drive,	
Harrell 1960 (oil company)	Miner 1962 (oil company)
Meranda & Clarke 1959 (life insurance)	Zdep & Weaver 1967 (life insurance)
Greenberg & Mayer 1964 (life insuracne)	Howells 1968 (technical rep)
Howells 1968 (vans)	Howells 1968 (retail)
Greenberg & Mayer 1964 (mutual fund)	
Greenberg & Mayer 1964 (automobile)	
Dunnette & Kirchner 1960 (trade)	
Dunnette & Kirchner 1960 (industrial	
Social Intelligence, Social Adapability	
Meranda & Clarke 1959 (life insurance)	Miner 1962 (oil company)
Howells 1968* (technical rep)	Harrell 1960 (oil company)
Howells 1968 (retail)	Pruden & Peterson 1971 (industrial)
Howells 1968 (van)	Scheilbelhut & Albaum 1973 (real estate)
	Scheilbelhut & Albaum 1973 (utililty)
	Bagozzi 1978 (industrial)
Intelligence	
Ghiselli 1969 (stockbroker)	Harrell 1960 (oil company)
Miner 1962 (oil company)	
Bagozzi 1978* (industrial)	
Empathy	
Tobolski & Kerr 1952 (new automobile)	Tobolski & Kerr 1952 (used automobile)
Greenberg & Mayer 1964 (automobile)	
Greenberg & Mayer 1964 (life insurance)	
Greenberg & Mayer 1964 (mutual fund)	
Lamont & Lundstrom 1977* (industrial)	

*significant but negatively related

measure personality variables as well as sales performance. Such variations can contribute to inconsistent results. For example, Tobolski and Kerr (1952) administered the Empathy Test to new and used car salesmen. They found empathy significantly related to the sales performance of new car salesmen but not to the sales performance of used car salesmen. Lamont and Lundstrom (1977) used Hogan's (1969) empathy scale to investigate the relationship between empathy and the performance of industrial salespeople. They found that empathy was significantly but negatively related to overall management evaluations of the salespeople.

Even though there have been methodological differences between these studies, the degree of inconsistency in results is substantial. Variables that can be assessed with high accuracy and reliability like age, education, and sales experience are related to performance in some studies and unrelated in others (Table 1). In addition, the relationship, when found significant, between these characteristics and performance is apparently weak. Churchill, Ford, Hartley, and Walker (1985) conducted a meta-analysis of 116 studies that investigated factors that influenced salesperson performance. The studies included in the meta-analysis were conducted between 1918 and 1982. The majority of these studies had focused on personal characteristics (25%) of the salesperson and aptitude measures (personality variables) (50%). Churchill et.al. (1985) found that the average correlation for aptitude measures was only .138 and for personal characteristics, .161. These findings suggest that, on average, slightly less than 2% of the variance in salesperson performance can be accounted for by variations

in aptitude or by variations in personal factors (Churchill et.al., 1985).

A second major approach in the study of salesperson performance was to match salesperson and customer characteristics to predict performance outcome. A great deal of this research focused on buyer-seller similarity. The rationale for these studies, which derived from the interpersonal influence and communications literature (e.g., Kelman, 1961; Homans, 1961), suggests that the probability of successful sales performance increases when the buyer and seller are similar along such dimensions as physical characteristics, backgrounds, interests, and attitudes.

The seminal research with regard to sales performance was conducted by Evans (1963). He matched physical and personal history characteristics of salespeople and prospects and analyzed similarity in those dyads which resulted in a sale as opposed to those situations where no sale occurred. His major conlusion was that similarity of attributes within a dyad increased the likelihood of a sale. Similar studies also found greater attitudinal similarity (e.g., Riordan et.al., 1977) and age similarity (e.g., Gadel, 1964) between salespeople and sold and unsold prospects. Although, these studies found a correlation between similarity and sales, they did not control for the rival hypothesis that customers who make puchases perceive that they were more similar to the salespeople than customers who do not make purchases.

The results of Evans' study also indicated that a customer's perceptions of similarity with the salesperson was of greater importance than actual similarity in increasing the likelihood of a

sale. As a result, a number of studies investigated the effects of perceived similarity between buyer and seller and sales outcome (e.g., Capon, 1975; Mathews et.al., 1972; Wilson et.al., 1972). The results of these studies suggest that the effectiveness of perceived similarity as a predictor of performance depends in part on the success criterion used. For example, Capon (1975) examined the relationship between perceived similarity and attitude toward the product, attitude toward the salesperson, and intention to purchase. The results showed a strong, positive relationship between perceived similarity and attitude toward the salesperson. However, no relationship was found between perceived similarity and attitude toward the product or between perceived similarity and the intention to purchase the product.

A number of studies using this approach studied the effectiveness of both perceived similarity between buyer and seller and perceived expertise of the salesperson on performance outcome (e.g., Busch and Wilson, 1976; Bambic, 1978; Brock, 1965; Woodside and Davenport, 1974). The results of these studies are inconsistent with regard to the relative effectiveness of perceived similarity and perceived expertise in explaining performance outcome. For example, both Bambic (1978) and Woodside and Davenport (1974) found that perceived expertise produced a greater proportion of purchases versus nonpurchases than perceived similarity. In contrast, Brock (1965) found that perceived similarity was more effective than perceived expertise in persuading customers to switch to higher and lower priced products. Wilson and Ghingold (1980) speculated that the power of expert and similarity treatments has not been equal, leading to inconsistent results.

A more recent approach to the study of salesperson performance views performance as a function of the salesperson's characteristics, the salesperson's environment, and his perceptions of that environment. Research in this area was stimulated primarily by a model of salesperson performance developed by Walker, Churchill and Ford (1977; 1979). The model posits that salespeople's performance is a function of five basic factors: motivation; aptitude; skill level; role perceptions; and personal, organizational/environmental variables. Personal, organizational/environmental variables also directly impact the other determinants of performance, and role perceptions directly impact satisfaction. Performance results in rewards, which, in turn, lead to job satisfaction.

The primary focus of these studies has been on the interrelationships between role perceptions, supervisory behaviors (organizational/environmental variables), job satisfaction and job performance. This appears to be a promising trend in the study of salesperson performance. For example, the results of the Churchill et.al. (1985) meta-analysis indicated that the average correlation between predictor and performance was highest for role perceptions (.294).

The role perceptions that have been studied most often are role ambiguity and role conflict and the primary dependent measure has been job satisfaction rather than job performance. Role conflict is the degree to which a salesperson believes that the demands of two or more of his role partners are incompatible and that all the demands cannot be simultaneously satisfied (Walker et.al., 1979). For example, a

salesperson is likely to experience role conflict when a customer's demands are incompatible with company policy.

Role ambiguity is the degree to which a salesperson does not feel he has the necessary information to perform the job adequately (Walker et.al., 1979). Thus, when salespeople are uncertain about what is expected of them, or how to satisfy expectations, or how their performance will be evaluated and rewarded they are likely to experience role ambiguity.

These constucts are of interest to marketers since several characteristics of the sales job make salespeople particularly susceptible to role conflict and role ambiguity. Salespeople occupy boundary positions requiring them to deal with individuals in external organizations as well as with individuals within various departments in their own firms (Donnelly and Ivancevich, 1975). Thus, the sales job involves a large number of people with diverse expectations, policies, and problems exerting pressure on the salesperson to satisfy their demands which are often incompatible (Pruden 1969; Belasco, 1966).

In addition, the sales job may involve some degree of innovativeness, requiring the salesperson to develop new business, to solve nonroutine problems, and to match company products to customer needs. The salesperson's need for creativity and flexibility to perform the job well increases the probability that the salesperson will be in conflict with the organization's operating procedures and with the expectations of other organizational members (Kahn et.al., 1964). The number of people and the diversity of situations involved in the job also create uncertainty concerning expectations and priorities.

Kahn et.al. (1964) suggested that role conflict and role ambiguity have dysfunctional psychological and behavioral consequences. Research in the organizational behavior literature has demonstrated the existence of associations among role conflict, role ambiguity, job tension, dissatisfaction and performance, although the results of this research are somewhat mixed. For example, some researchers have reported a significant, negative relationship between role ambiguity and satisfaction but no significant relationship between role conflict and satisfaction (e.g., Hammer and Tosi, 1974; House and Rizzo, 1972; Rizzo, House and Lirtzman, 1970). Others have found a significant, negative role conflict/satisfaction relationship but no significant relationship between role ambiguity and satisfaction (e.g., Tosi and Tosi, 1970; Tosi, 1971).

The sales force research investigating the influence of role conflict and ambiguity is summarized in Table 2. The studies examining the impact of role perceptions on salespeople's satisfaction has, for the most part, reported negative relationships. Franke, Behrman, and Perreault (1982), for example, found that a significant portion (60%) of salespeople's satisfaction was explained by role ambiguity and role conflict, along with two other variables - internal locus of control and nights worked (all predictors significant at $p < .02$). Role ambiguity, role conflict and nights worked were negatively related to satisfaction while internal locus of control was positively related to satisfaction.

Similarly, Behrman and Perreault (1984) reported that role ambiguity and role conflict were significantly ($p < .01$), negatively related and internal locus of control was significantly ($p < .01$)

TABLE 2

Summary of Research on Salesperson Role Perceptions

Explanatory Variables	Outcome Variables: Job Performance	Outcome Variables: Job Satisfaction
Role Ambiguity	(-) Bush & Busch, 1981-82 (x) Bagozzi, 1978 (-) Futrell, Swan & Todd, 1976 (-) Behrman, Bigoness & Perreault, 1981 (-) Franke, Behrman & Perreault, 1982 (-) Behrman & Perreault, 1984 (-) Dubinsky & Hartley, 1976	(-) Bush & Busch (1981-82) (-) Churchill, Ford & Walker, 1976 (-) Teas, Wacker & Hughes, 1979 (-) Donnelly & Ivancevich, 1975 (-) Futrell & Schul, 1977 (x) Bagozzi, 1978 (-) Franke, Behrman & Perreault, 1982 (x) Teas, 1983 (-) Behrman & Perreault, 1984 (-) Kohli, 1985 (-) Dubinsky & Hartley, 1986 (-) Fry, Futrell, Parasuraman & Chmielewski, 1986 (-) Ford, Walker & Churchill, 1976
Role Conflict	(-) Bagozzi, 1978 (x) Franke, Behrman & Perreault, 1982 (+) Dubinsky & Hartley, 1986 (+) Behrman & Perreault, 1984	(-) Ford, Walker & Churchill, 1976 (-) Churchill, Ford & Walker, 1976 (-) Bagozzi, 1978 (-) Franke, Behrman & Perreault, 1982 (-) Teas, 1983 (-) Behrman & Perreault, 1984 (x) Dubinsky & Hartley, 1986 (-) Fry, Futrell, Parasuraman & Chmielewski, 1986

(+ = positive relationship, - = negative relationship, x = nonsignificant relationship)

positively related to salesperson satisfaction. The predictor variables explained 42% of the variance in satisfaction. In both of these studies, the path coefficients for role ambiguity (-.30, Franke et.al.; -.32, Behrman and Perreault) and role conflict (-.32, Franke et.al.; -.30 Behrman and Perreault) were approximately equal in magnitude and were larger than the path coefficients of the other significant predictors of satisfaction (internal locus of control, .24, Franke et.al., .20 Behrman and Perreault; nights worked, -.20, Franke et.al.).

Several additional studies have reported significant negative effects of both role ambiguity and role conflict on salesperson satisfaction (Fry et.al. 1986; Churchill et.al., 1976; Ford et.al., 1976). Others, however, have obtained inconsistent results (Dubinsky and Hartley, 1986; Bagozzi, 1978; Teas, 1983). For example, the results of the study by Dubinsky and Hartley (1986) indicated that role ambiguity (-.43) was inversely and significantly ($p < .01$) associated with job satisfaction. Although the pairwise correlation between role conflict and satisfaction was significant ($p < .05$), role conflict was not a significant predictor of salespeople's satisfaction. Dubinsky and Hartley reported that role ambiguity alone explained 18% of the variance in satisfaction.

In contrast, Bagozzi (1978) and Teas (1983) found role conflict to be significantly ($p < .001$) negatively related to satisfaction. In both of these studies, role ambiguity was not a significant predictor of satisfaction but the pairwise correlations between ambiguity and satisfaction were significant ($p < .01$).

Several explanations have been offered for the inconsistent results. One possibility has to do with the role conflict measures used in the studies. Although most of the studies used items from the instrument developed by Rizzo et.al. (1970) to measure role conflict, the type of role conflict being measured varied. Both Franke et.al. (1982) and Behrman and Perreault (1984) measured several different types of role conflict including intersender conflict, intrasender conflict, personal role conflict and work overload. Intersender conflict occurs when customers, managers, family and members of the sales reps role set make competing demands while intrasender conflict occurs when competing or inconsistent demands come from a single individual (Miles and Perreault, 1976). When job expectations disagree with salespeople's personal values or orientations, personal role conflict occurs (Behrman and Perreault, 1984). Work overload results when the salesperson is expected to accomplish more than is possible given available time and resources. The results of both the Franke et.al. (1982) and Behrman and Perreault (1984) studies showed a significant role conflict/satisfaction relationship. Dubinsky and Hartley measured only intersender conflict and did not find a significant relationship between role conflict and satisfaction. Perhaps the significant effects of role conflict obtained in the two former studies were in part attributable to the fact that the conflict measures used tapped more of the different aspects of the conflict which the typical salesperson might experience on the job (Behrman and Perreault, p. 19; Dubinsky and Hartley, p. 43). This explanation is not entirely satisfactory because other studies that found role conflict significantly related to satisfaction measured only

intersender conflict as did Dubinsky and Hartley (Ford et.al., 1976; Churchill et.al., 1976; Fry et.al., 1986; Teas, 1983; Bagozzi, 1978). Only two of these studies, however, used items from the Rizzo et.al. intersender role conflict scale (Fry et.al., 1986; Teas, 1983).

The inconsistent findings also may be due to the high correlation between the role ambiguity and role conflict variables. To examine this issue, Teas (1983) estimated two job satisfaction equations, one dropping role ambiguity and the other excluding role conflict. Dropping role ambiguity had little effect on the results; the statistical significance of the remaining variables did not change, and the reduction in explained variance was small. Dropping role conflict resulted in a statistically significant ($p < .10$) negative role ambiguity/job satisfaction relationship, no changes in the significance of the other variables, and a small reduction in the amount of variance explained. These results support the findings concerning a significant role conflict/satisfaction relationship and indicate that the insignificance of role ambiguity in the original equation was due to shared variance between role ambiguity and role conflict, and thus should be interpreted with caution (Teas, 1983, p.89).

A further explanation for the failure of some researchers to obtain a significant role perception/satisfaction relationship relates to the type of job satisfaction measures used in the studies. The three studies reporting an insignificant role perception/satisfaction relationship used a composite measure of satisfaction (Bagozzi, 1978; Teas, 1983; Dubinsky and Hartley, 1986). The results of the study by Fry et.al., (1986) indicated that role conflict and role ambiguity have differential effects on various facets of job satisfaction. For

example, they found that role ambiguity had a significant ($p < .05$) negative influence on satisfaction with customers, job, and company policy and support. Role conflict had a significant ($p < .05$) negative effect on company policy and support, pay, promotion, fellow workers, job and supervisor. These findings suggested that role conflict impacted both intrinsic and extrinsic satisfaction while role ambiguity primarily affected intrinsic satisfaction. Other studies have also found that role ambiguity and role conflict differentially affected various components of job satisfaction (e.g., Ford et.al., 1976; Churchill et.al., 1976). Perhaps composite measures of satisfaction do not reveal significant associations between role perceptions and satisfaction, and as suggested by Fry et.al., the influence of role perceptions on individual facets of satisfaction should be considered.

Finally, the relationship between role perceptions and salesperson satisfaction may be moderated by other factors. Research in organizational behavior, for example, has found the role perception/satisfaction relationship to be moderated by the organizational level of the employee (e.g., Schuler, 1975; Szilagy, Sims and Keller, 1976) and employee participation in decision making (e.g., Schuler 1977a) as well as a number of individual difference variables such as need for clarity (e.g., Lyons, 1971), need for achievement (e.g., Johnson and Stinson, 1975), and years of experience (e.g., Schuler, 1977b).

As mentioned earlier, the relationship between role perceptions and performance has received less research attention than the role perception/satisfaction relationship. Among the most consistent findings concerning the impact of perceptions has been the significant

negative effect of role ambiguity on performance (see Table 2). In addition, relative to the other predictors of salesperson performance used in the various models, role ambiguity typically accounted for most of the variance in performance (e.g., Dubinsky and Hartley, 1986; Behrman and Perreault, 1984; Franke et.al., 1982).

The results concerning the effect of role conflict on performance are the most contradictory. As seen in Table 2, researchers investigating this relationship have alternately reported a significant, negative relationship (Bagozzi, 1978), a significant, positive relationship (Dubinsky and Hartley, 1986; Behrman and Perreault, 1984), and a positive, but insignificant relationship (Franke, Behrman and Perreault, 1982).

It had been suggested that individuals who select selling jobs may be attracted to the job because of its autonomous, innovative nature--the very characteristics which make it conducive to role conflict. Pruden and Reese (1972), for example, found that salesperson performance appeared to increase as a result of salespersons asserting some independence from their employers but, as they point out, "this maneuver also serves to position the salesmen in a marginal role with heightened cross pressures and tensions" (p. 605). Similarly, Tyagi (1985b), found that a salesperson's autonomy was particularly instrumental in positively influencing his performance. These findings imply that salespeople may prefer, and work more effectively, in autonomous jobs, which are also conducive to conflict. Thus, the direction of the influence of role conflict on performance may depend on the salesperson's ability to confront and cope with the conflict

associated with the job (e.g., Behrman and Perreault, 1984; Dubinsky and Hartley, 1986).

The results of the studies that investigated role perceptions suggest that role ambiguity and role conflict are likely to have a negative influence on salesperson job satisfaction and may differentially impact the various components of satisfaction. There is some evidence, for example, that role conflict may have a negative effect on both intrinsic and extrinsic satisfaction whereas role ambiguity may negatively impact only intrinsic satisfaction (e.g., Fry et.al., 1986). In addition, role ambiguity, relative to role conflict, appears to be more detrimental to salesperson performance. The effects of role conflict on performance may depend on salespeople's ability to handle conflict associated with the sales job.

In addition, these studies demonstrate that ambiguity and conflict are not independent. Several researchers, for example, found that role conflict increased role ambiguity (Behrman and Perreault, 1984; Franke et.al., 1982) while others found that increased role clarity was associated with less conflict (Donnelly and Ivancevich, 1975). The interdependence of ambiguity and conflict implies that sales managers who emphasize behaviors which influence one of these perceptions may, at the same time, influence the other.

Several studies have investigated a number of supervisory behaviors to ascertain their impact not only on role ambiguity and role conflict but also to determine their effect on satisfaction, motivation, and performance. Table 3 contains a summary of the results of the sales force research on supervisory behaviors. To obtain a clearer understanding of the influence of supervisory behaviors and to

TABLE 3

Summary of Research on Supervisory Behaviors

Explanatory Variables	Outcome Variables: Role Ambiguity	Role Conlfict	Motivation	Performance	Satisfaction
Sales force Participation	(-) Walker et.al. (1975) (-) Teas et.al. (1979) (x) Behrman & Perreault (1984) (-) Teas (1983)	(x) Walker et.al. (1975) (-) Behrman & Perreault (1984) (-) Teas (1983)	(+) Tyagi (1985b)	(+) Pruden & Reese (1972) (+) Futrell et.al. (1976)	(+) Pruden & Reese (1972) (+) Churchill et.al. (1976) (+) Futrell & Schul (1977) (+) Teas et.al. (1979) (+) Teas (1983)
Consideration Behavior	(x) Fry et.al. (1986) (-) Teas (1983)	(-) Fry et.al. (1986) (-) Teas (1983)	Tyagi (1982; 1985a 1985b)	Tyagi 1985b	(+) Teas & Horrell (+) Fry et.al. (+) Teas
Initiation of Structure	(-) Walker et.al. (1975) (-) Teas (1983) (-) Behrman & Perreault (1984) (-) Fry et.al. (1986)	(-) Walker et.al. (1975) (-) Teas (1983) (-) Behrman & Perreault (1984) (-) Fry et.al. (1986)			(+) Teas & Horrell (1981) (+) Fry et.al. (1976) (+) Churchill et.al. (1976) (+) Teas (1983)
Communication Frequency	(x) Walker et.al. (1975) (x) Behrman & Perreault (1984)	(x) Walker et.al. (1975)			(+) Churchill et.al. (1976)

(+ = positive relationship, - = negative relationship, x = nonsignificant relationship)

Table 3 (continued)

Explanatory Variables	Outcome Variables: Role Ambiguity	Role Conflict	Motivation	Performance	Satisfaction
Performance Feedback	(-) Teas (1983) (-) Teas, Walker & Hughes (1979)	(-) Teas (1983)	(+) Tyagi (1985b)	(+) Tyagi (1985b)	(+) Teas et.al. (+) Teas & Horrell (1981) (x) Teas (1983)
Achievement Oriented Behavior	(-) Kohli (1985)		(x) Tyagi (1985b) (x) Kohli (1985)	(x) Tyagi (1985b)	(x) Kohli (1985)
Hierarchical Influence	(x) Kohli		(+) Kohli (1985) (+) Tyagi (1985b)	(+) Tyagi (1985b)	(x) Kohli
Contingent Approving Behavior	(-) Kohli (1985)		(+) Kohli (1985)		(+) Kohli (1985)
Punitive Behavior	(x) Kohli (1985)		(x) Kohli (1985)		(+) Kohli (1985)

(+ = positive relationship, - = negative relationship, x = nonsignificant relationship)

facilitate discussion, the studies on supervisory behaviors have been ordered on the basis of the definitions of the explanatory variables used in each study.

Table 4 contains a summary of the definitions of the explanatory variables used in the supervisory behavior studies. Within each category, the labels and definitions of the explanatory variables differ but are believed to be conceptually similar enough to be grouped together.

Salesperson participation has received the most research attention relative to the other supervisory variables. Allowing salespeople to exercise some influence over various aspects of the job appears to be an efficient way to enhance the effectiveness of members of the sales force. It was consistently found to positively influence job satisfaction and performance, although few studies have examined the salesperson participation/performance relationship. With a few exceptions, the results indicate that sales force participation reduces both role ambiguity and conflict. As indicated in Table 3, Behrman and Perreault (1984) did not find a significant relationship between salesperson influence and role ambiguity whereas Walker et.al. (1975) did not find salesperson participation significantly related to conflict. The relatively low reliability estimates (alpha = .59) associated with the influence measure used in these studies may have affected the results.

Consideration behavior reflects a willingness to listen and to provide guidance to salespeople, creating a work environment of support and mutual trust. The results of the studies examining leader consideration behavior indicate that it has a negative impact on both

TABLE 4

Summary Information on Explanatory Variables
used in Supervising Behavior Studies

Construct	Description
Salesforce participation	
Influence over Standards:	Influence over criteria used for evaluating performance (Walker et.al., 1975, p. 34)
	Degree of influence the salesperson has over the selling activities involved in the job, and the criteria used for evaluating goal attainment, measured using summative, 6-item scale (Churchill et.al., 1976; Behrman & Perreault, 1984, p. 15, alpha = .59)
	Degree to which salesperson is able to influence decisions about his job, measured using instrument developed by Hackman & Oldham, 1975 (Teas, Wacker & Hughes, 1979; Teas, 1983, p. 85).
Individual Control & Influence in Work Situation:	Degree of influence in setting goals, control over means to accomplish them, and need to develop new ideas, measured on 3-item instrument (Futrell & Schul, 1977; Futrell, Swan & Todd, 1976, p. 29).
Power:	Influenc e over credit decisions, delivery time, type and number of products, pricing, measured on 5-item scale (Pruden & Reese, 1972, p. 609).
Consideration Behavior	
Leadership Consideration:	Extent to which salespersons feel their ideas and opinions are sought by the supervisor and taken into consideration in designing jobs which affect their performance; scales developed by Jones et.al., 1977 (Tyagi, 1982, p. 242; 1985a, p. 328; 1985b, p. 78).
Trust & Support:	The extent to which an individual has feelings of trust and confidence in a supervisor and to which the supervisor is aware of or responsive to the needs of his subordinates (Tyagi, 1985b,, p. 78).
Role Consideration:	Extent to which supervisor is perceived as providing coaching, guidance, support, and rewards necessary for

Table 4 (continued)

Construct	Description
	high job satisfaction and performance, measured using scales developed by Schriesheim, 1978 (Fry et.al., 1986, p. 154, alpha = .84).
Consideration:	Extent to which leader develops climate of support, mutual trust, respect, helpfulness and friendliness, using scales developed by House & Dessler, 1974 (Teas & Horrell, 1981; Teas, 1983, p. 85).
Initiation of Structure	
Initiation of Structure:	Degree to which leaders develop their roles and roles of subordinates in job-related activities such as specifying procedures and assigning tasks, using scales developed by House and Dessler, 1974 (Teas and Horrell, 1981; Teas, 1983, p. 85).
Role Clarification:	Degree to which supervisor is perceived as clearly establishing tasks or performance levels required for the job; scales developed by Schriescheim, 1978 (Fry et.al., 1986, p. 154, alpha = .93)
Closeness of Supervision:	The level of monitoring or "structuring" of rep's activities by the supervisor, using summative 12 item scale (Walker et.al., 1975, p. 32; Churchill et.al., 1976; Behrman & Perreault, 1984, p. 15, alpha = .83).
Communication Frequency:	Composite scale reflecting frequency of communication between a sales rep and manager: face-to-face, telephone, and written communication (Walker et.al., 1975, p. 35; Churchill et.al., 1976; Behrman & Perreault, 1984, p. 15, alpha = .69).
Performance Feedback:	Degree to which carrying out the work activities results in the individual obtaining clear information about the effectiveness of his performance; scale developed by Hackman & Oldham, 1975 (Teas, Wacker & Hughes, 1979; Teas & Horrell, 1981; Teas, 1983, p. 85; Tyagi, 1985b, p. 77, alpha = .58).
Achievement-Oriented Behavior	
Achievement-Oriented Behavior:	Composite measure using 4-item instrument developed by House which assesses the extent to which the supervisor sets challenging goals, expected high levels of performance, encourages continued involvement, expresses confidence that subordinates

Table 4 (continued)

Construct	Description
	will meet goals and expectations (Kohli, 1985, p. 426, alpha = .70).
Goal Emphasis and Facilitation:	Leader's emphasis on high standards of performance and his behavior which helps goal attainment; scale developed by Jones et.al., 1977 (Tyagi, 1985b, p. 78, alpha = .64).
Hierarchical Influence	
Upward Influencing Behavior:	Composite measure using 7-item instrument developed by Stogdill which assesses the extent to which the supervisor maintains good rapport with their superiors and influences them on behalf of the work unit (Kohli, 1985, p. 425, alpha = .90).
Hierarchical Influence:	Extent to which subordinates feel that supervisor is successful in getting management to recognize their problems and successes, using scale developed by Jones et.al., 1977 (Tyagi, 1985b, p. 78, alpha = .77).
Contingent Approving Behavior:	Extent to which supervisor gives recognition and approval to subordinates contingent upon effective effort or performance (Kohli, 1985, p. 425, alpha = .83).
Punitive Behavior:	Autocratic; ensures conformity to the work methods prescribed and increases productivity through punishment (Kohli, 1985, p. 425, alpha = .83).

role ambiguity and role conflict and a positive impact on job satisfaction (Table 3).

Consideration behavior also has been found to influence salesperson motivation and performance. For example, in one study, Tyagi (1985b) investigated the impact of two aspects of consideration behavior, "trust and support" and "psychological influence," on salesperson motivation and performance. Both had a positive impact on performance. Psychological influence impacted salesperson's extrinsic and intrinsic motivation, and "trust and support" influenced extrinsic but not intrinsic motivation. In other studies, Tyagi (1982; 1985a) again found that psychological influence affected salespeople's extrinsic and intrinsic motivation (1982) and was related to the importance of extrinsic but not intrinsic rewards (1985a). In these two studies, Tyagi alternately labeled "psychological influence," leadership consideration (1982) and considerate leadership (1985a). Trust and support, however, as defined by Tyagi, is more similar to definitions for consideration behavior used in other studies (see Table 4). As a result, both "psychological influence" and "trust and support" are considered as aspects of consideration behavior.

Initiation of structure entails defining job behaviors and performance levels, and specifying procedures for performing the job. As seen in Table 3, initiation of structure is likely to alleviate salesperson role ambiguity. Its affect on role conflict, however, is less definitive. Walker et.al. (1975) had hypothesized that "structuring" a salesperson's activities would increase role conflict. They found, however, that the direction of the relationship was negative, although not statistically significant.

Teas (1983) found that initiation of structure as hypothesized by Walker et.al. (1975), had a significant ($p < .05$) positive affect on role conflict. Fry et.al. (1986), on the other hand, found a significant ($p < .05$) negative association between "role clarification behavior" and role conflict. The most likely explanation for the contradictory results relates to the differences in the scales used to measure this type of supervisory behavior. The scales used by Walker et.al. (1975) represent a more global measure of "closeness of supervision" than those used by either Teas or Fry et.al. (see Table 4). The latter two appear to differ in terms of the nature of the behavior being measured. Fry et.al., for example, appears to emphasize "clarifying" behavior while Teas appears to emphasize "structuring" behavior. The results suggest that "structuring" and "clarifying" the salesperson's job may reduce role ambiguity but how role conflict is affected may depend on the nature of the behavior being measured.

The frequency of communication between the supervisor and salespeople appears to have little affect on salespeople. Providing salespeople with information concerning their performance, however, was negatively related to role ambiguity and role conflict and positively related to intrinsic and extrinsic motivation, performance and satisfaction. Teas (1983) suggested that the nonsignificant feedback/satisfaction relationship found in his study was due to the feedback measure employed (p. 90).

Supervisors who engage in achievement-oriented behavior set high standards of performance and encourage goal attainment. As shown in Table 3, this behavior was found to reduce salespeople's role ambiguity but appears to have no direct impact on satisfaction, performance or

motivation. The relationship between achievement-oriented behavior and role conflict was not investigated in any of these studies.

Hierarchical influence reflects the supervisor's influence with his superiors. It was found to have a significant influence on performance, extrinsic motivation (Tyagi, 1985b), and perceptions of a relationship between performance and intrinsic rewards (Kohli, 1985). It was not significantly related to intrinsic motivation or to job satisfaction.

As shown in Table 3, the one study that investigated the effects of reinforcing behavior found that giving recognition and approval to salespeople contingent upon effective efforts and/or performance caused increases in job satisfaction, role clarity, and perceptions of a relationship between performance and extrinsic rewards. Punitive actions, unexpectedly, increased satisfaction, but was not related to role ambiguity or extrinsic or intrinsic motivation.

The evidence for the positive influence of sales force participation and initiation of structure on role perceptions is relatively substantial. Consideration behavior and providing performance feedback appear to have pervasive effects on salesperson effectiveness although they are not well documented. That is, except for the influence on satisfaction, they are based on the results of only a few studies.

Summary of Research on Salesperson Performance

The results of the research on salesperson performance indicate that the most fruitful approach to the study of salesperson performance may be to investigate the impact of role perceptions. The studies

investigating the relationship between salesperson characteristics and performance reported inconsistent results. In addition, the Churchill et.al. (1985) findings concerning the relative ability of various determinants of performance suggest that "influenceable" characteristics, such as role perceptions, skill level, and motivation, do a better job of explaining variations in performance than "enduring" characteristics such as aptitude and personal traits. The implication is that from a manager's point of view, the individual recruited is important, but probably not as important as what the sales manager does with the recruits--and to them--after they have been hired (Churchill et.al. , 1985, p. 117).

The research on supervisory behaviors indicates that sales managers have the opportunity to engage in particular behaviors that not only may help to alleviate the negative effects of role ambiguity and role conflict but also may have a positive influence on salesperson satisfaction, motivation, and performance. For example, allowing salespeople to have some influence over job-related decisions and clarifying tasks, performance levels, and procedures appear to be particularly instrumental in alleviating the negative effects of role ambiguity and conflict.

This is of particular relevance to this study since the performance appraisal system should provide the organizational structure and management procedures through which the sales manager influences salesperson performance. Conducting performance appraisals with salespeople, focusing on critical job activities and specifying the interrelationships between effort, performance and rewards appears

to be an effective way to reduce role ambiguity and conflict, to improve salesperson productivity, and to increase job satisfaction.

Sales Force Evaluation Research

This section presents a review of the research on sales force evaluation in the sales management literature. This research can be divided into three categories: (1) research aimed at developing procedures for effectively evaluating salespeople; (2) studies describing sales force evaluation procedures used in sales management practices; and (3) research focusing on how managers use evaluation information in decision making. The review of the evaluation research will be structured according to these categories. First, a brief overview of the evaluation procedure will be presented to provide an understanding of performance evaluation as reflected in the sales management literature (e.g., Churchill et.al., 1985; Anderson, Hair and Bush, 1988; Stanton and Buskirk, 1983).

The evaluation process begins by defining performance bases or criteria on which members of the sales force will be evaluated. Then, performance standards and objectives that specify the level of performance desired on each base are established (Stanton and Buskirk, 1983). Performance standards may be determined individually by management or derived mutually by management and members of the sales force.

In selecting criteria for evaluating salesperson performance, both quantitative and qualitative variables may be considered. Quantitative variables can be measured objectively and include both input factors and output factors. Inputs are the "efforts" of the salespeople and

include such criteria as number of sales calls, number of service calls and customer complaints handled. Outputs are the "results" of salespeople's efforts and include variables such as sales volume, net profit and percent of quota achieved (Anderson et.al., 1988).

Characteristics such as product knowledge, communication skills, appearance, and attitude are examples of typically used qualitative factors. Qualitative factors are subjectively assessed by the sales manager using any one (or several) of a variety of evaluative techniques (e.g., check-off lists, rating scales, narratives) (Churchill et.al., 1985).

The sales reps' performance is monitored by the sales manager and his actual performance is compared with his expected performance on each specific objective. The results of this analysis are then summarized and translated into some form of evaluation (e.g., rating scales or narratives). Finally, the results are reviewed with the salesperson for the purpose of correcting deviations between actual and derived results (Stanton and Buskirk, 1983).

Literature on Evaluative Methods

The literature discussed in this section includes conceptual and empirical work that examined evaluation methods and procedures. The discussion focuses primarily on two evaluative techniques, management by objectives (MBO) and behaviorally anchored scales (BARS), that were introduced into the sales management literature in the 1970s (Jackson and Aldag, 1974; Cocanougher and Ivancevich, 1978). Of the two, MBO has received the most attention.

With an MBO (management by objectives) program, evaluation focuses on "end results" or what salespeople do rather than what "they are." It thus overcomes the primary focus and weakness of traditional rating scales, which are trait oriented (Taylor, 1977). MBO involves superiors and subordinates jointly setting goals; planning strategies to reach goals; monitoring progress and goal attainment; and joint performance appraisals (McConkie, 1979). Thus, salespeople are evaluated on the basis of how well they attain specific, challenging, and measurable goals that they set with their sales managers at some earlier date. Since results are tied to desired rewards, management affects motivation without direct control (Etzel and Ivancevich, 1974).

The are many proponents of MBO. They contend that mutual setting of objectives encourages participative management, brings about and sustains a greater commitment to organizational goals, affords the subordinate greater freedom since MBO is ends-oriented rather than means-oriented, reduces uncertainty about superiors' wants and expectations, and enhances the development of the salesperson's potential (e.g., Jackson and Aldag, 1974).

However, there are several disadvantages of an MBO approach. Setting measurable objectives and assessing the degree of achievement are two of the most serious problems associated with MBO programs (Stein, 1975). For example, some goals are not easily expressed in quantitative terms but are, nevertheless, important with regard to overall performance. In addition, by focusing on end results alone, MBO programs ignore "behaviors" or work itself, although such behaviors influence goal attainment. Thus, it may be just as appropriate to

evaluate salespeople on behaviors as on end results (Cocanougher and Ivancevich, 1978).

Futrell, Swan and Lamb (1977) conducted a longitudinal study to assess the impact of implementing an MBO program on salesperson satisfaction and performance. They found that one year after implementing MBO, supervisors rated salesperson performance significantly more favorably on eight out of ten measures. Ratings could have been influenced, however, by the supervisors' involvement in the program (Futrell et.al., 1977). Salespersons' satisfaction with promotion increased, but most facets of job satisfaction remained unchanged. Salespeople also perceived a loss of personal influence and control over establishing goals. The findings are consistent with the results of other studies that indicated some, but not all, dimensions of performance and satisfaction improve with an MBO program (e.g., Ivancevich, 1974).

In contrast to MBO, BARS (behaviorally anchored scales) is a technique designed to evaluate salespeople on the basis of job behaviors and activities rather than end results. A BARS system focuses on performance criteria that can be controlled by the individual. Specifically, implementation of BARS requires that the behaviors that are instrumental to performance be identified. The subsequent evaluation of a salesperson's performance is conducted by rating their key behaviors using the appropriate description (Schwab et.al., 1975).

Briefly, a BARS evaluation system involves identifying key behaviors with respect to performance using critical incidents (Kirchner and Dunnette, 1957). To use the critical incident technique,

those involved (e.g., sales personnel) identify some outstanding examples of good or bad performance and detail reasons why. The behavior described in the critical incident is then rated on a seven or ten point scale with respect to how effectively or ineffectively it represents performance on that dimension. Incidents that generate agreement in ratings are considered for the final scale, which typically has six to eight anchors.

The primary advantage of BARS is that the salesperson is evaluated on job activities under his control rather than end results which are often influenced by factors external to the salesperson (e.g., Cocanougher and Ivancevich, 1978; Locander and Staples, 1978). BARS is not without its limitations, however. Implementation of a BARS system is time consuming, costly, and job specific. BARS has received little research attention in the sales management literature since its introduction, perhaps due to its limitations.

Recently, Muczyk and Gable (1987) proposed combining three existing evaluation approaches to develop an effective performance appraisal system: MBO, BOS (behavioral observation scales), and forced choice rating scales (which focus on traits). According to Muczyk and Gable, the BOS technique is analogous to, but simpler than, BARS. BOS is also based on critical incidents and involves the same type of procedure as used with BARS (i.e., identifying significant job-related behaviors that either enhance or detract from performance). The procedure results into a 5-point Likert scale for each behavioral item. The disadvantages associated with BOS are the same as those associated with BARS (i.e., time consuming, costly and job specific).

According to the authors, using all three techniques will create a performance appraisal system that gives management the capability to manage the sales force effectively by managing performance well. Such a favorable outcome is provided because the three methods possess compensating strengths and weaknesses.

Research on Evaluation Practices

This section discusses the results of studies that investigated the evaluation methods used by sales managers. These studies focused primarily on the type of evaluative criteria used in performance evaluations. Sales volume and qualitative factors appear to represent the principal performance appraisal criteria. In several studies, for example, the most frequently cited performance criterion by both large and small companies was sales volume (Jackson, Ostrom and Evans, 1982; Dubinsky and Barry, 1982). In another study, sales volume and qualitative factors such as attitude, product knowledge, and selling skills were reported as the most frequently used salesperson performance criteria (Jackson & Schlacter, 1980).

Similarly, Jackson, Keith and Schlacter (1983) found that more than 80% of the participants in recent sales management seminars reported that they used such qualitative factors as product knowledge, attitude and appearance to evaluate salespeople. Over one-half of these respondents indicated that they used sales volume in performance evaluations. Criteria named most often in terms of their importance in the evaluation of salespeople were attitude, initiative/aggressiveness, judgment/decision making, planning ability, and sales volume.

Several studies investigated the extent to which sales managers used MBO as an evaluative technique (Jackson and Schlacter, 1980; Dubinsky and Barry, 1982). Jackson and Schlacter (1980) found that most of the respondents in their study established specific performance standards and, in about one-half of the firms, the objectives were set jointly by management and the salesperson. Although the majority of the respondents reported the use of an evaluation interview in which the salesperson's performance was evaluated, the frequency of the evaluation interviews varied considerably. Jackson and Schlacter (1980) concluded that few of the reporting firms actually used MBO as an evaluation technique. Dubinsky and Barry (1982) found that management by objectives was more likely to be used as a supervisory tool than as an evaluative technique. They also reported that the use of MBO was more prevalent in large than in small companies.

Research on Evaluation Decision Making Processes

A review of the sales management research that focused on the way evaluation information is used in making decisions concerning salespeople is presented in this section. Several of these studies investigated the decision model(s) used by sales managers to evaluate salespeople (Perreault and Russ, 1971; Patton and King, 1985). The primary interest in these studies was to examine how sales managers combine and use multiple evaluation criteria in making decisions concerning members of the sales force.

Evaluation decision models can be placed into two categories. One category consists of linear or compensatory models. These models allow poor performance on one criterion to be offset by good

performance on another criterion. The decision maker chooses the salesperson who has the best score on some linear or weighted linear evaluation function.

The other category consists of nonlinear, noncompensatory models, which include conjunctive, disjunctive, and lexicographic models. When using the conjunctive model, the decision maker compares salespeople on their weakest attribute or performance criterion, with the salesperson scoring the highest of the weak scores being judged as the preferred salesperson (the "best" of the worst") (Einhorn, 1970). With the disjunctive model, the decision maker evaluates each salesperson according to his single best ability regardless of scores on other criteria or the relative importance of other criteria (best of the best) (Perreault and Russ, 1977; Wright, 1973). If using the lexicographic model, the decision maker orders performance criterion in importance and a decision is made on the basis of scores on the most important criterion. The second ordered criterion is used only if two or more salespeople tie on the first ordered criterion, and so on, until a decision is reached (Tversky, 1972).

One of the studies examining evaluation decision models (Perreault and Russ; 1971) compared linear and noncompensatory models to assess their relative predictive ability and the frequency of use of each model in making decisions. A sample of MBA students (66) were shown rating profiles of several salespeople on multiple attributes (for example, product knowledge) which had supposedly been completed by the salespersons' supervisor. The set of rating profiles was designed to provide a means for predicting the decision of the subjects under

each of the models. Subjects were then asked to make decisions concerning the compensation of the salespeople.

One of the most significant findings was that linear models were used almost twice as often as lexicographic models. Another significant finding was the improvement in the predictive ability of the linear model when importance weights were included, that is, when the performance criteria were ordered according to their relative importance with the most important criterion given the most consideration in reaching a decision. With a weighted linear model, a salesperson conceivably could perform poorly on two insignificantly-weighted criteria but well on a more significantly-weighted criterion and still be rated as the best salesperson.

In a similar study, Patton and King (1985) sought to determine if the models differed in their predictive ability and use depending on the type of decision under consideration. A sample of field sales managers were presented with rating profiles of six hypothetical salespeople on several attributes. Subjects were asked to make five evaluative decisions concerning the salespeople: to rank order them from best to worst; to select one salesperson for promotion; to select one salesperson to transfer to a lucrative, challenging territory; to allocate $10,000 in bonus money among the salespeople; and to select one salesperson for termination. Respondents were also asked to rank order the attributes according to importance in making each type of decision, yielding five sets of importance rankings, one for each of the five decisions.

The results indicated that the models varied in use and predictive ability across decisions type. For example, linear compensatory models

predicted best for positive decisions and non-linear models predicted best for negative decisions. The weighted linear compensatory model provided the most consistent predictive ability across decision type. In addition, Patton and King found that the relative importance attached to the evaluative criteria varied significantly across decision type. They found that sales volume was the most important criterion in termination, bonus, and overall performance decisions, while product knowledge was the most important factor in transfer and promotion decisions.

Mowen and his colleagues have conducted a number of studies designed to assess the relative importance of evaluative criteria in salesperson performance evaluations. These studies were designed to see if sales managers have a tendency to place more emphasis on personal characteristics of the salesperson, specifically the salesperson's level of effort, than on external factors, specifically territorial conditions, when evaluating salespeople. Mowen, Brown & Jackson (1980-81) and Mowen, Keith, Brown & Jackson (1985) manipulated territorial difficulty and effort information using verbal scenarios. Territorial difficulty was manipulated by describing the sales territory of the salespeople either very unfavorably (high difficulty) or very favorably (low difficulty). Effort of the salesperson was manipulated by comparing the number of sales calls of the salesperson with those of other company sales personnel either favorably (high effort) or unfavorably (low effort).

Subjects were asked to role play that they were sales managers evaluating one of their subordinates. After reading information about a salesperson's performance, subjects rated the salesperson in terms of

overall performance (extremely high - extremely low), promotion potential (extremely high - extremely low), and sales possibilities for the next year (much higher - much lower). Each of the dependent variables was measured using a one-item, seven point rating scale.

The results of both studies showed that variations in territory difficulty had no measurable impact on performance evaluation while the level of the salesperson's effort was directly related to evaluators' ratings. The most notable difference between these two studies is that one used sixty MBA students as subjects (Mowen et.al., 1980-81) and the other used 120 professional sales managers as subjects (Mowen et.al., 1985).

Mowen, Fabes & LaForge (1986) conducted a study designed for the same purpose but, rather than presenting the performance information in verbal scenarios, they used a numerical spreadsheet format which included information about three other salespeople for subjects to use for comparative purposes. One hundred and six business students participated and were again asked to role play that they were sales managers evaluating one of their subordinates. The two levels of salesperson effort were created by manipulating the number of cold calls made per year by the salesperson, the average number of follow-up calls per year, and the average time spent preparing for calls. The two levels of territorial difficulty were varied by manipulating the number of the firm's major competitors, the regions's economic outlook, the average time spent by the salesperson traveling between customers, and total market size of the product the firm produced in the territory. After reading the spreadsheet information on the four

salespeople, subjects were asked to rate the overall performance of one of the salespeople on three, seven-point rating scales.

Results indicated that territorial difficulty influenced the evaluations. Salespeople were evaluated higher when assigned to more difficult territories. Evaluators were also influenced by effort information, rating the salesperson significantly higher in the high effort conditions than in low effort conditions.

The results also showed that variations in territory difficulty influenced rater perceptions of effort. Subjects perceived that salespersons exerted greater effort in the high territory difficulty conditions than in the low territory difficulty conditions. The obverse did not occur; variations in effort information did not influence perceptions of territory difficulty.

Summary of Research on Sales Force Evaluation

Several important conceptual and methodological implications for the present research can be drawn from the review of sales force evaluation research. First, in evaluating members of the sales force, sales managers tend to use multiple performance criteria, typically consisting of qualitative attributes in conjunction with sales volume. The set of performance dimensions tend to include both job-related ability (e.g., planning ability, selling skills) and job-related effort (e.g., attitude, initiative/aggressiveness) and are considered of some importance to practicing sales managers for evaluation purposes (Jackson and Schlacter, 1980; Jackson et.al., 1983). In addition, there is some evidence that the relative importance of these attributes

are likely to vary in importance depending on the decision under consideration (Patton and King, 1985).

Second, the use of a spreadsheet-type format and the inclusion of comparison salespersons in presenting performance information appear to enhance information processing and the need to attend more carefully to available data in reaching decisions (Mowen, Fabes and LaForge, 1986). And, finally, students and professional sales managers appear to process information and make decisions in much the same way (Mowen et.al., 1980-81; Mowen et.al., 1985; Patton and King, 1985; Perreault and Russ, 1977).

Research on Sex Differences in Sales Jobs

The research on sex differences in the context of sales jobs consists of studies investigating differences in male and female salesperson perceptions of various job dimensions, studies examining customer acceptance of female salespersons, and one study investigating sex differences in evaluation processes. The review of the research on sex differences will follow this categorization.

Research on Sex Differences in Salesperson Perceptions

On the basis of existing research there appears to be few significant differences between male and female industrial salespersons in terms of perceptions of satisfaction with various job components. For example, Busch and Bush (1978), in a survey of 39 female and 39 male pharmaceutical salespeople, found that although females expressed

lower levels of satisfaction on all job components than did males, none of the differences were significant. The value of Spearman's rho = .94 ($p = .01$) indicated the high degree of similarity between male and female sales personnel. The Job Description Index (Smith, Kendall and Hulin, 1969), which measures satisfaction with five areas of the job (work, pay, opportunities for promotion, supervision, and coworkers) plus a scale to assess satisfaction with customers, was used to measure job satisfaction. The primary method of analysis was the t-test for independent measures.

Swan, Futrell and Todd (1978), in a survey of 160 male and 29 female salespeople employed in two pharmaceutical and one national hospital supply companies, obtained similar results. They found that saleswomen, compared to salesmen, were more satisfied with pay and work and less satisfied with promotion possibilities but the differences were not statistically significant. However, females were significantly ($p < .05$) less satisfied with supervisors and coworkers (Swan et.al., 1978).

Male and female salespersons appear to differ significantly in the importance to which they attach to job components. For example, Busch and Bush (1978) found that males placed significantly greater importance on promotion than did females ($p < .05$), while females placed significantly greater importance on customers than did males ($p < .05$). Swan, Futrell and Todd (1978) found that females, in comparison with males, were significantly less interested in pay ($p \leq .001$), promotion ($p \leq .05$), and job security ($p \leq .01$) and significantly more interested in the opportunity for independent thought and action ($p \leq .001$) and the opportunity to meet different

people ($p \leq .01$). Although females placed less importance on pay than did males, pay was considered among the three most important job rewards by women (Swan et.al., 1976).

There also appears to be some significant sex differences among real estate salespeople in terms of the desirability of various job rewards. The results of a survey of 59 male and 54 female real estate salespeople (Gibson and Swan, 1981-82) indicated that females, compared with males, placed significantly more importance to above average income ($p < .01$), personal growth ($p < .01$), customer relationships ($p < .05$), and contributing to the well being of society ($p < .05$). The results of the study revealed no significant differences between males' and females' expectations of success.

These studies found several additional significant sex differences. For example, Busch and Bush (1978) found that female salespersons had significantly ($p = .002$) lower role clarity scores than did males. In addition, Swan et.al. (1978) found that female salespeople expressed less confidence in product knowledge ($p \leq .05$), selling ability ($p \leq .01$) and calling on specialists ($p \leq .001$) than did males salespeople.

In a related study, Busch (1980) investigated the relative impact of a manager's power bases on female and male salespeople's role clarity and satisfaction with their supervisor. A power base is a source of influence in a relationship. Social power theory (French and Raven, 1959) identifies five bases of social power: expert power, the perception that a person in a relationship has valuable knowledge, information, or skills in a relevant area; referent power, the perceived attraction of members in a relationship to one another;

legitimate power, the perception that one person has the right to influence and that other members in the relationship have an obligation to yield to this influence; reward power, the perception that one member in the relationship has the capacity to provide rewards; and coercive power, the perception that a person has the capacity to remove rewards or administer punishments.

Busch (1980) obtained responses from 477 (436 males, 39 females) pharmaceutical salespeople. The results indicated that generally there were not many differences between male and female salespeople in terms of the relationships between their sales manager's power base and their satisfaction with supervision and their role clarity. A few differences were found. For example, the relationship of the sales manager's expert power to role clarity was stronger for males than for females. In addition, female salespersons were found to be more responsive to the sales manager's referent power than were male salespeople.

Research on Customer Acceptance of Female Salespersons

Two studies were conducted to assess the degree of customer acceptance of female salespersons. Lundstrom and Ashworth (1983) examined new car buyers' perceptions of female salespersons in the automobile industry while Swan, Rink, Kiser and Martin (1984) examined purchasing agents' perceptions of male and female industrial salespersons. The results of these studies are reviewed in this section.

Lundstrom and Ashworth collected data in several automobile dealerships in a large Southeastern city and in dealerships in rural

Mississippi and Arkansas towns. This resulted in data from 183 urban (103 males, 80 females) and 157 rural (85 males, 72 females) new car buyers, which allowed for a comparison of the differences in perceptions between urban and rural purchasers as well as a comparison of the differences in perceptions between male and female buyers.

Respondents rated the female salespersons from whom they bought their car on four personality variables (outgoing/reserved, confidence/apprehension, sensible/scatterbrained, calm/excitable), four job-related attributes (competent/incompetent, intelligent/unintelligent, career-oriented/home-oriented, good sales technique/poor sales technique), and three evaluative criteria (fair/unfair, honest/dishonest, and good/bad).

The results for the aggregate sample indicated that saleswomen were rated at least average on all attributes and received their highest ratings for honesty, followed closely by intelligence. There were some differences between urban and rural car purchasers in their perceptions of female automobile salespeople. Urban purchasers, compared to rural purchasers, rated saleswomen significantly more favorably on five of the attributes (sensible, calm, competent, good sales technique and fair). The results of the study also indicated that female buyers, in comparison with males, rated the saleswomen significantly more favorably on all but three criteria (intelligence, fair, and honest).

In the Swan et.al. (1984) study, they compared purchasing agents' perceptions of male and female salespersons. They mailed questionnaires to members of the Purchasing Management Associations of Arkansas and Illinois and obtained response rates of 57% (Arkansas) and

48% (Illinois). Respondents were asked to rate either a salesman or saleswoman on 23 attributes using a 7-point "excellent to extremely poor" scale.

The results indicated significant differences ($p \leq .05$) in the ratings on eleven of the attributes. Female salespersons were rated more favorably on seven of significantly different dimensions: vigor/drive, listening ability, preparation of sales presentation, personalized presentation, follow-up deliveries, willingness to handle rush orders, no back door selling. In contrast, men were rated more favorably on product knowledge, knowledge of company selling to, technical assistance, and presents many new ideas to buyer. Swan et.al. (1984) concluded that there was little evidence of sex-role stereotyping, that females should not face problems of customer acceptance, and that purchasing agents appear to have a favorable image of female salespersons.

Research on Sex Differences in Evaluation Processes

Only one study was found in the sales management literature that examined the effects of sex differences on performance evaluations. Futrell (1984) examined the difference in salespeople's perceptions of male and female sales managers using various leadership styles. Sixty salespeople (30 males and 30 females) who were attending a yearly national meeting participated in the study.

Each subject was randomly assigned to one of four experimental groups and presented with a set of written instructions describing a situation in which a male or female district sales manager is confronted with a low productivity problem among his or her

salespeople. The instructions then described three approaches that the manager might use to improve group sales performance: (1) an autocratic leadership style; (2) a democratic leadership style; and (3) the use of both an autocratic or democratic leadership style depending upon the situation faced by the manager (situational leadership style).

Subjects were asked to rate the effectiveness of, and their satisfaction with, each leadership style. Subjects rated either the the male or the female district manager, not both. Data were analyzed using multivariate analysis of variance followed by univariate analyses of the 2 x 2 x 3 (repeated measures) mixed design. The results indicated that the male district sales manager was perceived significantly more favorably than the female district sales manager on both effectiveness ($p < .05$) and satisfaction ($p < .05$). This was true for both male and female subjects in the study.

When management style was analyzed, the democratic style was preferred over the situational style, followed by the autocratic style for both male and female managers. In addition, the autocratic style was rated significantly less favorably when displayed by the female manager for effectiveness ($p < .01$) and for satisfaction ($p < .05$).

Subject sex had an impact on the perceived effectiveness of and satisfaction with the various management styles. Females, relative to males, felt that the autocratic leadership style would be less effective ($p < .05$) and less satisfying ($p < .05$). Males, relative to females, felt that female managers using the autocratic leadership style would be significantly less effective than the male manager ($p < .01$).

Summary of Research on Salesperson Sex

Several findings in the research on differences in female and male salesperson perceptions are of interest for the present research. The findings that females attached relatively less importance to promotion (Busch and Bush, 1978) and were less satisfied with promotion possibilities (Swan, Futrell and Todd, 1978) than men, may be an indication that these females did not perceive promotion as an attainable goal. In addition, the lower role clarity scores for women (Busch and Bush, 1978) and expressions of less confidence in job-related skills (Swan, Futrell and Todd, 1978) may be indicative of ineffective performance feedback in terms of what is expected of them and how they are performing job skills. The finding that female salespersons were significantly less satisfied with supervisors (Swan, Futrell and Todd, 1978) makes this reasoning more feasible.

It should be noted, however, that this research was conducted nearly a decade ago when women represented only 6.6% of total professional sales representatives. These women were "pioneering" the entrance of females into a traditionally male occupation. Increased female participation in professional sales may have tempered these effects. However, recent evidence indicates that although sales managers provide females with positive feedback, many remain reluctant to criticize or admonish female salespeople for inappropriate behavior and poor performance (Fraker, 1984). There is also some evidence that professional saleswomen view promotion as more difficult than actual job entry in industrial sales (Skolnik, 1985).

On the basis of their finding that females were rated more favorably on more of the attributes where significant differences were

found, Swan et.al. (1984) concluded that, "...industrial saleswomen should be better received than industrial salesmen" (p. 114). Swan et.al. provide no evidence of the relative importance that the participating purchasing agents attached to the various attributes or whether the purchasing agents viewed some attributes as more positive than others. The most definitive conclusion that can be derived from their study is that men and women salespersons were perceived differently by their clients. Men were rated more favorably on job-related competence attributes (e.g., technical assistance), while females were rated more favorably on job-related effort dimensions (e.g., vigor, preparation). Which of these images would be met with greater or less acceptance is unclear from the data provided.

Finally, the results of these studies indicate that observer sex may make a difference in the perceptions of male and female salespeople. For example, females may tend to rate female salespersons more favorably than do males (Lundstrom and Ashworth, 1983). However, they are not likely to rate females more favorably than they rate males with equivalent behaviors (Futrell, 1984).

Related Research

Several studies in the organizational behavior literature are related to the present research. These studies examined the effects of ability-derived performance versus effort-produced performance, and the effects of sex differences, on treatment decisions. This research is reviewed to gain insight concerning the relative importance of these factors in making different decisions.

Two of the reviewed studies examined the effects of good

performance derived from different causes on the allocation of two rewards, promotion and pay raise (Heilman and Guzzo, 1978; Pazy, 1986). Participants in the Heilman and Guzzo study were twenty-nine MBA students who were told that they would be reviewing excerpts from annual job performance evaluations of four employees in beginning management positions. Subjects reviewed information about either males or females, with each varying in cause of success. Cause was manipulated by a fictitious supervisor's responses to four items concerning the employees' ability, effort, luck, and the difficulty of the task. For each of the stimulus persons reviewed, subjects were asked to rate the appropriateness of pay raise and promotion using nine-point bipolar scales ranging from "very appropriate" to "very inappropriate." Analysis of variance with repeated measures on the cause of performance factor was conducted for each of the appropriateness ratings.

Heilman and Guzzo found no significant main effects or interactions involving sex of employee. However, there were some significant differences on the appropriateness ratings involving the cause of success. For example, both pay raise and promotion were viewed as significantly more appropriate for success based on ability or effort than for success based on luck or task difficulty ($p < .01$ all comparisons). In addition, while pay raise was viewed as equally appropriate for success due to ability or effort, promotion was viewed as more appropriate when work success was due to ability than to effort ($p < .01$).

In a similar study, Pazy (1986) asked subjects, forty-eight middle managers, to review information about four employees (two males and two

females) portrayed as middle level managers who succeeded due to either high ability or high effort. This information was presented as excerpts from standard performance appraisal forms filled in by the employees' supervisor. For each fictitious employee, eight 9-point dimensions were presented, four relating to ability and four relating to effort. Sex of employee and reported cause of success were manipulated within subjects.

Respondents were asked to rank the four employees (from highest to lowest) according to appropriateness of pay raise and appropriateness of promotion to a higher managerial level. Similar to the Heilman & Guzzo findings, the results indicated that employees with high ability were more often perceived as deserving promotion than those who exerted high effort. In contrast to the findings of Heilman & Guzzo, employees exerting high effort were perceived as more deserving of a pay raise than those with high ability. However, the ranking method used in this study forced subjects to make a choice between high effort and high ability employees.

The results concerning employee sex are also in contrast to the findings of Heilman and Guzzo. While Heilman and Guzzo found no significant sex effects on the appropriateness of pay or promotion, Pazy found significant sex effects on these decisions. For example, when the reported cause of success was identical, the male employee was consistently ranked higher than the female employee in all conditions except pay raise in the ability condition. That is, in the high effort condition, the male employee was perceived as more deserving of pay raise and promotion than the female employee and, in the high ability condition, the male employee was perceived as more deserving of

promotion than the female employee. In the high ability condition, pay raise was considered equally appropriate for males and females.

The final study reviewed from the organizational behavior literature provides insight concerning the relative effects of ability and effort and the effects of sex on decisions regarding poor performances. Pence, Pendleton, Dobbins, and Sgro (1982) examined the appropriateness of different types of corrective actions for poor performance portrayed as resulting from various causes. Subjects were 100 male and 100 female undergraduate students enrolled in introductory psychology courses at Virginia Polytechnical Institute and State University. The same general procedures used by Heilman and Guzzo (1978) were employed with half of the subjects randomly assigned to the female employee condition and half to the male condition. Subjects were asked to rate the appropriateness of several corrective actions using 9-point rating scales with verbal endpoints of "very inappropriate" to "very appropriate."

Results indicated that the appropriateness of the corrective actions varied according to the perceived cause of the poor performance. For example, coercive corrective actions were considered most appropriate for employees whose poor performance was perceived to be the result of lack of effort followed by lack of ability and bad luck. Coercive actions were considered least appropriate for poor performance perceived to be caused by a difficult task. All differences were significant ($p < .05$). In contrast, both nonpunitive actions and changing the employee's job were considered more appropriate for poor performance perceived to be due to lack of

ability than poor performance perceived to be due to the other causes ($p < .05$).

In addition, taking no action was considered more appropriate for failure due to either task difficulty or bad luck than for failure due to either lack of ability or low effort ($p < .05$). However, in comparing ability and effort, taking no action was considered more appropriate for failure due to to lack of ability than low effort ($p < .05$). Finally, Pence et.al. (1982) found one significant effect involving sex of the employee. The results indicated that subjects considered it significantly more appropriate to punish male employees than female employees for poor performance ($p < .05$).

Summary of Related Research

The results of these studies imply that sales managers are likely to want to reward good performance due to effort but not necessarily make long-term commitments, such as promotions, that depend on stability of behavior. On the other hand, promotions may be more likely when performance is seen as due to ability rather than effort (Heilman and Guzzo, 1978; Pazy, 1986). Similarly, based on the Pence et.al. (1982) findings, sales managers may be more likely to punish poor performance due to lack of effort than low ability and to be more inclined to help a salesperson whose poor performance is seen as caused by low ability rather than lack of effort.

The implications concerning sex differences on treatment decisions are less clear. The inconsistent findings may be attributed to differences in methodology. Pazy (1986) using mixed-sex sets, where

respondents compared mixed-sex groups simultaneously, and a rank-ordering response format, obtained sex differences. Heilman and Guzzo (1978), on the other hand, had respondents evaluate either all males or all females, using a rating response format. The results indicated no differences in pay and promotion decisions due to sex.

Summary of Chapter II

This chapter presented a review of the relevant research. Four areas were considered important for the present study: research on salesperson performance, research on sales force evaluation, research on sex differences in sales jobs, and related research from organizational behavior literature. Research within each of these topics was reviewed and the implications of the findings were discussed in relation to the present study.

The following chapter presents a presentation of the research hypotheses and methodology. Sample characteristics, data collection procedures, and reliability and validity issues will be discussed.

CHAPTER III

CONCEPTUALIZATION OF THE RESEARCH TOPIC AND RESEARCH METHODOLOGY

Introduction

This chapter is divided into several sections. It begins with a conceptualization of the research topic followed by a discussion of the research hypotheses. The chapter ends with a discussion of the research methodology.

Conceptualization of Topic

The typical performance appraisal system requires an observer, such as a sales manager, to record, on some standard form, his opinions and feelings about the job performance of his employees. The products of this appraisal process, which are sets of ratings, can play an important role in enhancing the effectiveness of the sales organization. Their usefulness is hindered, however, by their susceptibility to bias and inaccuracy which stems from a number of personal, contextual and psychometric factors (cf. Cooper, 1981; Landy and Farr, 1980).

Research aimed at identifying methods for improving the quality and accuracy of performance ratings has traditionally focused on making the rating instrument less prone to bias. In the psychometric tradition, this approach has centered on improving the content and format of evaluation instruments (cf. Feldman, 1981). In general, the results of these studies have had only a small impact on the accuracy

of ratings (cf. Schwab et.al., 1975; Smith, 1976). Consequently, several researchers have called for a moratorium on such research and a redirection of efforts toward the study of the cognitive processes involved in performance appraisal (e.g., Cooper, 1981; Feldman, 1981; Landy and Farr, 1980).

Even though the inclusion of social cognition concepts in performance appraisal is a relatively recent development, several cognitive models have already been proposed (e.g., Ilgen and Feldman, 1983; DeNisi, Cafferty and Meglino, 1984). Although these models differ in scope, they are similar in that performance appraisal is conceptualized as a perceptual process which is heavily influenced by the information processing capabilities of appraisers. Rating errors are perceived as behavioral or cognitive phenomena governed by individual differences, that is, cognitive differences among evaluators, rather than simply properties of scales or instruments (Landy and Farr, 1980).

The above models (Ilgen and Feldman, 1983; DeNisi et.al., 1984) center primarily on the cognitive processes involved in the acquisition of appraisal information, the storage of that information in memory, and the retrieval of information from memory. In contrast, the present study focuses on the cognitive processes involved in the use of performance information that has already been collected and converted into ratings on a scale.

There is some evidence, though limited, that the type of decision under consideration has a significant influence on the information processes of evaluators including the type of information used as well as the relative weights assigned to different items of performance

information. For example, Zedeck and Cascio (1982) found that identical performance dimensions were weighed, combined and integrated differently, depending on whether the purpose of the rating was for a merit raise or for development or retention. Similarly, Patton and King (1985) found that evaluative criteria varied in importance depending on whether termination, bonus, transfer, or promotion decisions were being made.

In addition, Williams et.al. (1983) found that raters making salary decisions (how large a raise each of four workers should get) tended to seek distinctiveness information. When the decision involved which worker should be promoted, raters tended to search for consensus information. Thus, when making decisions involving behavioral predictions (e.g., who to promote), raters sought information that would allow them to judge or compare a rater's performance relative to the performance of others. When the decision was an absolute judgment based on how good or poor each worker was doing, presumably the rationale for a salary increase, information which allowed the evaluator to judge how well each worker did on all tasks involved in the job was preferred (Williams et.al., 1983).

The above findings suggest that ratings on performance dimensions are likely to have a greater influence on decisions requiring comparisons among salespeople (such as promotion or transfer) than on decisions requiring absolute judgments (such as recognition or compensation). Decisions of the latter type are more likely to hinge on the salesperson's overall performance level (e.g., high versus low sales volume) rather than on the salesperson's level of performance on particular dimensions. For example, supervisors are likely to want to

reward or recognize good performance regardless of whether the salesperson performed high on ability attributes or high on effort attributes. On the other hand, when deciding who to promote, supervisors are likely to be choosing from among salespeople who have equally good performances. In such situations, ratings on the performance dimensions are likely to become more important and heavily influence the decision.

The present research involved an examination of the relative influence of job-related ability and job-related effort on decisions that are based on evaluation information. The performance dimensions selected to represent ability and effort are not all-inclusive. Rather they were chosen for three primary reasons: (1) to represent those dimensions commonly used in evaluating salespeople (cf. Jackson, Keith and Schlacter, 1983), (2) to reflect those characteristics considered important for achieving success in computer sales (cf. DOT, 1982; IBM Corporation, 1983), and (3) to include both input and output factors as well as quantitative and qualitative measures (cf. Jackson, Ostrom and Evans, 1982; Dubinsky and Barry, 1982).

A number of other references, in addition to those cited above, including sales management textbooks (e.g., Churchill, Ford and Walker, 1985), sales management handbooks (Bobrow and Wizenberg, 1983; Patty, 1982; Sheer, 1982), and personnel management handbooks (Armstrong and Lorentzen, 1982; Famularo, 1982; Carlsen and McHugh, 1978) were consulted in order to find commonly used evaluative criteria and their definitions. The handbooks contain copies of evaluation forms used by various organizations throughout the United States in their performance appraisal systems. Although these evaluation forms varied in terms of

format, they were very consistent in terms of the performance dimensions included and how they were defined. Almost every form, regardless of the type of job involved, included product knowledge, attitude and initiative/aggressiveness as evaluative criteria. In addition to these dimensions, selling skills and effort were consistently used as evaluative criteria for a variety of sales jobs while technical skills were commonly used for evaluating the performances of sales engineers, electronic data processing, and computer sales representatives. Consequently, product knowledge, selling skills and technical skills were selected to indicate job-related ability while attitude, initiative/ aggressiveness, and level of effort were chosen to represent job-related effort. These dimensions were defined as follows:

Product Knowledge:	Demonstrated knowledge of the products' characteristics,uses, advantages, etc. (adapted from Patton and King, 1985).
Selling Skills:	Demonstrated ability to present and demonstrate the products' features, advantages, and benefits to the customer, to handle objections,to close the sale and to direct the presentation to the needs of the customers (adapted from Churchill, Ford and Walker, 1985, p. 237.
Technical Skills:	Demonstrated knowledge of technical aspects of the products, knowledge of technical problems involved in their application; ability to communicate with staff engineers (adapted from Churchill, Ford and Walker, 1985, p. 237).
Level of Effort:	The amount of time and effort the salesperson devotes to the job; calling on customers, servicing accounts, preparing presentations, etc.
Initiative/ Aggressiveness:	Demonstrated self-reliance and self-motivation; the salesperson's willingness to take the lead, accept responsibility, and originate solutions to problems (adapted from Sheer, 1982; Bobrow and Wizenberg, 1983; Famularo, 1982; and Patty, 1982).

Attitude: Demonstrated interest in the job; enthusiasm toward work (adapted from Sheer, 1982; Bobrow and Wizenberg, 1983; Famularo, 1982; Patty, 1982; and Armstrong and Lorentzen, 1982).

Research Hypotheses

This section presents a statement of the research hypotheses and rationale. The hypotheses reflect the expected influence of ability-related performance dimensions versus effort-related performance dimensions on various decisions. The direction of the hypotheses were derived from the review of the literature. The first nine hypotheses concern corrective action decisions. Hypotheses 1 through 5 concern the relative effects of ability and effort dimensions on corrective action decisions. Hypotheses 6 through 9 state expected salesperson sex effects with regard to corrective actions.

H1: Termination will be considered more likely for salespeople who are rated low on effort-related criteria than for those rated low on ability-related dimensions.

H2: Nonpunitive corrective actions will be considered more likely for salespeople rated low on ability dimensions than those rated low on effort dimensions.

H3: Coercive actions will be considered more likely for salespeople rated low on effort than for those rated low on ability.

H4: Transfer out of the district will be considered more likely for salespeople rated low on ability than for those rated low on effort.

H5: Taking no action will be considered more likely for salespeople rated low on ability attributes than for those rated low on effort.

Termination decisions involve behavioral predictions and comparison judgments, thus increasing the importance of the various performance dimensions. The relative effects of ability-criteria and effort criteria are derived from previous research conducted in other

occupational settings (Pence et.al., 1982). For example, previous research has found that low ability was more important than low effort for nonpunitive, transfer and taking no action while low effort was more important than low ability in coercive action decisions.

H6: Termination will be considered more likely for males rated low on effort than for females rated low on effort.

H7: Coercive actions will be considered more likely for males with low effort than for females with low effort.

H8: Nonpunitive corrective actions will be considered more likely for females rated low on ability than for males rated low on ability.

H_9: Transfer out of the district will be considered more likely for females with low ability than for males rated low on ability.

Previous research has found that females, compared to males, are less likely to be punished for poor performance (Pence et.al., 1982). In addition, there is some indication that sales managers are reluctant to admonish or criticize female salespeople (Fraker, 1984). Pence et.al. (1982) found no significant sex differences concerning nonpunitive actions and transfer decisions. However, they used a same-sex group to be evaluated while the present study used mixed-sex groups. Given the tendency to avoid the use of punitive actions toward females and the need to do something about poor performers, nonpunitive actions and transfer, representing more positive methods of dealing with poor performers, are expected to be considered more likely for females than for males.

The following eight hypotheses concern rewarding actions. Hypotheses 10 through 13 concern the relative effects of ability and effort on reward decisions while hypotheses 14 through 17 concern the effects of salesperson sex on reward decisions.

H10: Promotions will be considered more likely for salespeople who are rated high on ability-related attributes than for those rated high on effort-related dimensions.

H11: Transfer to a more lucrative, challenging territory will be considered more likely for salespeople rated high on ability criteria than for those rated high on effort criteria.

H12: There will be no significant differences between the likelihood of compensating salespeople who are rated high on ability attributes and those rated high on effort attributes.

H13: There will be no significant differences between the likelihood of recognizing salespeople rated high on ability and those rated high on effort attributes.

Promotion decisions, like termination decisions, require a subjective estimate concerning future behavior. Consequently, the evaluative criteria included on the rating instrument are expected to significantly influence the decision. Previous research has found that promotion was considered more appropriate for good performance due to high ability than high effort (Heilman & Guzzo, 1978; Pazy, 1986). In addition, Patton and King (1985) found that product knowledge, an ability attribute, was the most important criterion for sales managers in making promotion and transfer decisions.

Compensation and recognition decisions are likely to be based on each salesperson's performance level and good performance is expected to be compensated and recognized similarly regardless of cause. Patton and King (1985) found that sales volume, which is indicative of performance level, was the most important criterion in compensation decisions. Other studies have found no significant differences in compensation for good performance derived from ability and effort (Heilman and Guzzo, 1978; Pazy, 1986). No empirical evidence is provided concerning the relative influence of ability and effort for

recognition. This rationale led to the no significant differences hypothesis.

H14: Promotion will be considered more likely for males rated high on ability dimensions than for females rated high on ability attributes.

H15: Transfer to a more lucrative, challenging territory will be considered more likely for males rated high on ability criteria than for females rated high on ability dimensions.

H16: There will be no significant sex differences in compensation decisions.

H17: There will be no significant sex differences in recognition decisions.

The results of previous research are mixed regarding the effects of sex on promotions. One study (Heilman and Guzzo, 1978), using same-sex groups, obtained no significant sex differences, whereas another study (Pazy, 1986), using mixed sex groups, found significant sex differences. Since the present study uses same-sex groups, sex differences are expected. No empirical evidence is provided for H_{15}. However, based on the rationale that transferring a salesperson to a better territory is analogous to promoting a salesperson, sex effects should be the same.

The rationale for hypotheses 16 and 17 is similar to that provided for hypotheses 13 and 14, concerning the desire to reward good performances regardless of cause. Compensation and recognition decisions are more likely to be based on the salesperson's performance on all dimensions rather than comparisons. Consequently, no differences are expected in the compensation and recognition of males and females for good performance. Table 5 contains a summary of the research hypotheses.

TABLE 5

Summary of Research Hypotheses

Hypothesis	Corrective Action	Evaluative Criteria	Evaluative Criteria and Salesperson Sex	Salesperson Sex
1	Termination	Low Effort		
2	Nonpunitive	Low Ability		
3	Coercive	Low Effort		
4	Transfer Out	Low Ability		
5	No Action	Low Ability		
6	Termination		Low Effort Males	
7	Coercive		Low Effort Males	
8	Nonpunitive		Low Ability Females	
9	Transfer Out		Low Ability Females	
10	Promotion	High Ability		
11	Transfer Up	High Ability		
12	Compensation	No Significant Differences		
13	Recognition	No Significant Differences		
14	Promotion		High Ability Males	

TABLE 5 (continued)

Hypothesis	Corrective Action	Evaluative Criteria	Evaluative Criteria and Salesperson Sex	Salesperson Sex
15	Transfer Up		High Ability Males	
16	Compensation			No Significant Differences
17	Recognition			No Significant Differences

Research Methodology

This section of the chapter presents a description of the research methodology and rationale for the various methods used. It begins with an overview of the design.

Design Overview

Subjects were asked to role play that they are sales managers evaluating one of their subordinates. Role playing studies have been argued to be appropriate methodology for the exploration of subjects' beliefs about the way people behave, based upon evidence that role playing can capture the decision processes of individuals (Forward, Canter and Kirsch, 1976). In addition, role playing has been suggested as an important methodology for laboratory experimentation in marketing (Suprenant and Churchill, 1984).

Subjects

The dependent measure instrument was administered to a subject sample of 269 students enrolled in marketing classes at Louisiana State University. The goal was to obtain a minimum of 240 usable questionnaires in order to ensure that at least 30 subjects could be assigned to each of the eight experimental conditions. The sample consisted primarily of juniors and seniors (94%) and included some MBA students. Seventy-one percent of the subjects were from the College of Business Administration with a small percentage (29) from other colleges. The sample consisted of 145 males (54%) and 124 females (46%). The mean age of the students was 22.9 years. The students were asked to volunteer and no one refused to participate.

Thirteen questionnaires were eliminated from the sample, resulting in a sample population of 256 subjects. Eleven of these were eliminated from the sample due to incompletion and two were eliminated due to evidence of demand characteristics.

Students rather than professional sales managers were used as subjects. This raises the question of external validity. In a review of six separate studies, however, Berstein, Hakel and Harlan (1975) concluded that the personnel judgments of students and professionals were nearly identical. The results of other reviews support these conclusions (e.g., Dipboye et.al., 1975; Landy and Bates, 1973). There is evidence that it is quite likely that sales managers will react in a manner similar to students. In previous sales force evaluation research, both students and sales managers have been used in similar studies and responded in much the same way (Mowen et.al., 1985 and Mowen et.al., 1980-81; Perreault and Russ, 1977; Patton and King, 1985).

In addition, after analyzing the empirical articles appearing in several major journals, Dipboye and Flanagan (1979) concluded that laboratory research which relies on college student subjects, "provides as firm a basis for generalization to the population of working people and organizations as does field research . . ." (p.147). They based their conclusion on the fact that the organizational samples most frequently used were from a narrowly defined and homogeneous group. The homogeneous nature of the typical organizational sample, they claim, challenges the assumption of generalizability to other organizational samples--just as the homogeneity of college students also may limit generalizability.

Procedure

Subjects were randomly assigned to each of the eight experimental conditions resulting in 32 subjects in each condition. They were told that the objective of the study was to examine how individuals form impressions and make various personnel decisions on the basis of limited information. They were asked to review information about five computer sales representatives (3 males, 2 females), but responded to questions concerning only one of the salespeople; the other four salespeople were used for comparison purposes. The subjects were told that they were reviewing excerpts from standard performance appraisal forms filled in by the sales rep's supervisor. A verbal description of the job concerning the functions and responsibilities of a computer sales rep were presented to subjects to provide a basis for making decisions about sales rep's performance.

Subjects received a cover sheet, a description of the rating scale used in rating each salesperson along each performance dimension, and a set of rating profiles, one for each of the five salespeople evaluated. The cover sheet explained that all five of the sales representatives had completed the company's training program, that they had approximately the same experience in computer sales, and that they all had college degrees. The description of the rating scale included definitions of the seven attributes as well as an explanation of the rating procedure used in evaluating the salespeople. The hypothetical sales manager's ratings for each of the five salespeople on each of seven performance dimensions were presented in the form of a set of rating profiles, one for each salesperson. The format was used in Patton and King's study (1985) but the performance dimensions were

changed for this study. The effectiveness of this type of format for processing information has also been demonstrated by Mowen et.al. (1986). The provision of mixed-sex comparison persons seem appropriate since a salesperson's performance is typically considered in the context of other salespeople and some of the decisions the subjects were asked to make require the use of comparative data.

Manipulations

Each set of profiles contained two sales reps rated as high performers, two rated as low performers, and one rated as an average performer. Subjects did not make decisions concerning the average performer; he was included for realism. For each salesperson, ratings on seven, 10-point dimensions were presented, three indicative of job-related ability, three reflecting job-related effort and one indicating performance level - sales volume for the preceding six months.

Two sets of profiles were developed. As shown in Table 6, one set contained the following combinations, presented in counterbalanced order: female rated high on effort attributes, male rated high on ability attributes, female rated low on ability, male rated low on effort. The second set, shown in Table 7, contained: female rated high on ability, male rated high on effort, female rated low on effort, male rated low on ability. These combinations showing males and females performances on different job-related attributes within the same set of profiles, should reduce threats to validity due to salience of equal treatment.

High performing salespeople were also rated high on sales volume while low performers were rated low on sales volume to enhance the

TABLE 6

EVALUATION OF SALESPERSONS

Salesperson	Evaluation Criteria	Rating									
		Far Worse Than Average									Far Better Than Average
BETTY	Product knowledge	1	2	3	4	5	6	7	8	9	10
	Initiative	1	2	3	4	5	6	7	8	9	10
	Selling skills	1	2	3	4	5	6	7	8	9	10
	Level of effort	1	2	3	4	5	6	7	8	9	10
	Technical skills	1	2	3	4	5	6	7	8	9	10
	Attitude	1	2	3	4	5	6	7	8	9	10
	Sales volume	1	2	3	4	5	6	7	8	9	10
JACK	Product knowledge	1	2	3	4	5	6	7	8	9	10
	Initiative	1	2	3	4	5	6	7	8	9	10
	Selling skills	1	2	3	4	5	6	7	8	9	10
	Level of effort	1	2	3	4	5	6	7	8	9	10
	Technical skills	1	2	3	4	5	6	7	8	9	10
	Attitude	1	2	3	4	5	6	7	8	9	10
	Sales volume	1	2	3	4	5	6	7	8	9	10
MARY	Product knowledge	1	2	3	4	5	6	7	8	9	10
	Initiative	1	2	3	4	5	6	7	8	9	10
	Selling skills	1	2	3	4	5	6	7	8	9	10
	Level of effort	1	2	3	4	5	6	7	8	9	10
	Technical skills	1	2	3	4	5	6	7	8	9	10
	Attitude	1	2	3	4	5	6	7	8	9	10
	Sales volume	1	2	3	4	5	6	7	8	9	10
BOB	Product knowledge	1	2	3	4	5	6	7	8	9	10
	Initiative	1	2	3	4	5	6	7	8	9	10
	Selling skills	1	2	3	4	5	6	7	8	9	10
	Level of effort	1	2	3	4	5	6	7	8	9	10
	Technical skills	1	2	3	4	5	6	7	8	9	10
	Attitude	1	2	3	4	5	6	7	8	9	10
	Sales volume	1	2	3	4	5	6	7	8	9	10
JAMES	Product knowledge	1	2	3	4	5	6	7	8	9	10
	Initiative	1	2	3	4	5	6	7	8	9	10
	Selling skills	1	2	3	4	5	6	7	8	9	10
	Level of effort	1	2	3	4	5	6	7	8	9	10
	Technical skills	1	2	3	4	5	6	7	8	9	10
	Attitude	1	2	3	4	5	6	7	8	9	10
	Sales volume	1	2	3	4	5	6	7	8	9	10

TABLE 7

EVALUATION OF SALESPERSONS

Salesperson	Evaluation Criteria	Rating									
		Far Worse Than Average									Far Better Than Average
BETTY	Product knowledge	1	2	3	4	(5)	6	7	8	9	10
	Initiative	1	2	(3)	4	5	6	7	8	9	10
	Selling skills	1	2	3	4	5	(6)	7	8	9	10
	Level of effort	1	(2)	3	4	5	6	7	8	9	10
	Technical skills	1	2	3	4	(5)	6	7	8	9	10
	Attitude	1	(2)	3	4	5	6	7	8	9	10
	Sales volume	1	2	(3)	4	5	6	7	8	9	10
JACK	Product knowledge	1	2	3	4	5	(6)	7	8	9	10
	Initiative	1	2	3	(4)	5	6	7	8	9	10
	Selling skills	1	2	3	4	5	6	(7)	8	9	10
	Level of effort	1	2	3	4	5	(6)	7	8	9	10
	Technical skills	1	2	3	(4)	5	6	7	8	9	10
	Attitude	1	2	3	4	5	(6)	7	8	9	10
	Sales volume	1	2	3	4	(5)	6	7	8	9	10
MARY	Product knowledge	1	2	3	4	5	6	7	8	(9)	10
	Initiative	1	2	3	4	(5)	6	7	8	9	10
	Selling skills	1	2	3	4	5	6	7	(8)	9	10
	Level of effort	1	2	3	4	(5)	6	7	8	9	10
	Technical skills	1	2	3	4	5	6	7	8	(9)	10
	Attitude	1	2	3	(4)	5	6	7	8	9	10
	Sales volume	1	2	3	4	5	6	7	8	(9)	10
BOB	Product knowledge	1	(2)	3	4	5	6	7	8	9	10
	Initiative	1	2	3	4	(5)	6	7	8	9	10
	Selling skills	1	2	(3)	4	5	6	7	8	9	10
	Level of effort	1	2	3	4	(5)	6	7	8	9	10
	Technical skills	1	(2)	3	4	5	6	7	8	9	10
	Attitude	1	2	3	4	5	(6)	7	8	9	10
	Sales volume	1	2	(3)	4	5	6	7	8	9	10
JAMES	Product knowledge	1	2	3	4	(5)	6	7	8	9	10
	Initiative	1	2	3	4	5	6	7	(8)	9	10
	Selling skills	1	2	3	4	(5)	6	7	8	9	10
	Level of effort	1	2	3	4	5	6	7	8	(9)	10
	Technical skills	1	2	3	(4)	5	6	7	8	9	10
	Attitude	1	2	3	4	5	6	7	8	(9)	10
	Sales volume	1	2	3	4	5	6	7	8	(9)	10

perceptions of high and low performance levels. In the high ability conditions, salespeople were rated high on all three ability-related dimensions and sales volume, and average on the effort-related dimensions. In the high effort conditions, the sales reps were rated high on all three effort-related dimensions and sales volume, and average on the ability dimensions. Low performers, in the ability conditions, were rated low on all ability dimensions and sales volume, and average on effort attributes; in the effort conditions, low performers were rated low on all effort dimensions and sales volume and average on ability. To assure that subjects attended to the salesperson's sex, the salesperson's name accompanied each rating profile. (A copy of the questionnaire is provided in the appendix).

A fully crossed design was not used because certain cells appeared highly implausible (e.g., high performance with low ability and effort and low performance with high ability and effort. Instead, the two performance dimensions (ability/effort) were crossed with sex (female/male) within the performance levels. This design was considered the most appropriate for testing the hypotheses.

Dependent Measures

Subjects were asked to rate the likelihood of taking each of several actions toward the salesperson, using a 9-point graphic rating scale with verbal endpoints of "very unlikely" to "very likely." They also were asked to characterize the sales reps on a series of 9-point bipolar adjective scales which included scales to provide checks on the manipulations of the independent factors. Additional information

regarding the subjects was collected in the final section of the questionnaire.

Instruments. Instruments for measuring actions toward the salesperson were developed for this study. Options available for the typical sales manager in dealing with poor performers suggest several possible categories of corrective actions. The most drastic action is firing. Second, the salesrep might be punished for performing poorly through coercive actions such as verbal admonishment or threats. Third, the salesperson might be considered inappropriately matched to the job and transferred or demoted. Fourth, a sales manager might use a positive reinforcement approach to correct the salesperson's performance through counseling or working with the salesperson. Finally, the manager may take no action toward working with the salesperson.

Pence et.al. (1982) developed an 11-item instrument which they used to measure subjects' responses concerning the appropriateness of the various corrective actions using a 9-point rating scale. They conducted factor analyses which resulted in each of the eleven corrective actions loading significantly on only one of the four factors corresponding to the four categories of alternative supervisory actions (coercive, nonpunitive, transfer and no action). The items used by Pence et.al. as well as additional items suggested during pretesting were used to develop the instrument used in this study for measuring subjects' responses concerning the likelihood of corrective actions. The wording of the items used by Pence et.al. (1982) was slightly altered for the purposes of the study. For example, the word

"employee" was changed to "sales rep" or "salesperson" in all cases. Where "pay" and "salary" are mentioned, "base pay" or bonus was substituted. The seventeen items used to develop the dependent measure instrument are shown in Table 8.

There are also several logical options available for the typical sales manager in dealing with high performing sales reps: promotion, compensation, recognition, and transfer to a better, more lucrative territory. A search of the literature generated a list of different actions exemplifying these decisions categories (e.g., Dorfman, Stephan, and Loveland, 1986; Heilman and Guzzo, 1978; Kohli, 1985). The items shown in Table 9 were used to develop the instrument for measuring subjects' responses concerning the likelihood of rewarding actions. Responses on both scales were combined into summated scores for use as dependent measures.

Several scales provided a check on the independent variable manipulations. Ratings on a male/female scale were used to assess the subjects' perceptions of salesperson sex. Ratings on three scales were averaged to comprise an ability measure: intellectually capable-intellectually incapable; competent-incompetent; and bright-dumb. Averaged scores on the following scales served as a check on the effort manipulations: hard worker-lazy; ambitious-unambitious; reliable-unreliable. Two scales were averaged to assess perceived performance level: successful-unsuccessful and high performer/low performer.

TABLE 8

CORRECTIVE ACTIONS

Admonish the employee for the poor performance.
Threaten the employee with a pay deduction if performance does not improve.
Threaten to fire the employee is performance does not improve.
Deduct a portion of the employee's salary for the poor performance.
Fire the employee.
Transfer the employee to another job.
Demote the employee to a less demanding job.
Work with the employee and show the employee how to do the job.
Offer encouragement to the employee to improve work performance.
Take no action against the employee.
Promise a pay raise if the employee does a better job in the
Do nothing at all.
Recommend additional training for the salesperson.
Give salesperson three to six months to improve performance or lose job.
Have a friendly meeting with salesperson to discuss possible problems.
Counsel with salesperson about performance.
Send salesperson for additional training.

TABLE 9

ACTIONS FOR GOOD PERFORMERS

Promote the sales rep
Recommend the sales representative for promotion
Give the salesperson a bonus
Give the salesperson an increase in base salary
Compliment the sales rep for the good performance
Praise the sales rep for the good performance
Give the salesperson clear recognition for the good performance
Transfer to a more lucrative and challenging territory within your district

Analyses

Reliability and validity. Prior to using the measures to assess the effects of the independent variables, the reliability of the scales was assessed. Reliability is the degree to which a measure is free from error and thus provides consistent results (Peter, 1979, p. 9). Through estimation of the error variance (i.e., the difference between the "true" score and the observed score for a construct) one can assess the reliability of a scale.

Several methods may be used to assess reliability: test-retest, alternate (parallel) forms, and internal consistency (Churchill, 1979). For this study, Cronbach's coefficient alpha was used for assessing internal consistency reliability. This method determines the mean reliability coefficient for all possible ways of splitting a set of items in half rather than arbitrarily splitting the data. Alpha is considered more theoretically sound than the other procedures and is a more conservative measure, providing the smallest reliability score for each scale (Bagozzi, 1976). In addition, alpha has been considered the most useful measure of assessing reliability in marketing research (Peter, 1979). High internal consistency provides support for the construct validity of a measure. Results of the reliability assessment are discussed in the next chapter.

Validity means that the data must be unbiased and relevant to the characteristic being measured (Green and Tull, 1983). A measure is valid when differences in observed scores reflect "true" differences (Churchill, 1979, p. 65). Reliability of a measure is a necessary, but not sufficient condition, for validity.

Content or face validity assesses the degree to which the measures selected represent the constructs. Careful selection of scale items and purification of the scale should satisfy content validity requirements.

To assess construct validity, factor analysis was used. Principal components analysis, with a varimax rotation, was used. The principal components model with an orthogonal solution is the appropriate factor method when the objective is to use the derived factors in subsequent analysis (Hair et.al., 1987). The varimax algorithm was used because of its widespread acceptability and application in marketing. Results of the scale evaluation are presented in the next chapter.

Manipulation checks. Analyses of variance of the ratings on the adjective scales designed to provide checks on the independent variable manipulations were run. Analysis of variance was conducted with the perceived sex measure as the dependent variable and the factors (sex, performance level and ratings on performance dimensions) as independent variables. A second analysis of variance was conducted with the perceived effort measure as the dependent variable and sex, performance level, and performance ratings as the independent variables. A third analysis of variance was used to assess the efficacy of the ability manipulation with the perceived ability measure as the dependent variable. Finally, the performance level measure was used as the dependent variable in an analysis of variance. Eta squared, which indicates the amount of explained variation in the response variable, was calculated for significant effects.

Actions. MANOVA on scores for the action subscales was used to test for the significance of effects of the independent variables. A

randomized block design was used. In these designs, the significance of the block differences is assumed and the treatment effects of research interest are corrected for the block variables (Green and Tull, 1983). Performance level was used as the block variable because the levels of performance were, to a great extent, defined by the levels of the two performance dimensions. Failure to correct for performance level effects could cause the effects of the performance dimensions to be masked by a larger-than-necessary error term. In addition, performance level effects were of no interest for the purposes of the study. This design allowed for assessment of the main effects of the independent variables and the interaction effects of performance dimensions and salesperson sex.

In MANOVA, it is assumed that the observations within cells are independent. This assumption is usually met with randomly drawn samples. It is also assumed that the error variance is equal among cells and is normally distributed. Computer analysis generates several statistics (e.g., Bartlett's Box F and Box M) and residual plots for use in assessing the normality and homogeneity assumptions. Wilk's lambda (approximate F) was the statistic for assessing the significance of the effects. Roy-Bargman stepdown analysis was used to identify significant differences. This approach is superior to univariate F-tests which do not take into consideration possible correlations among dependent variables (Hair et.al., 1987). Omega squared was calculated for significant effects. Omega squared is useful for showing which of the independent variables are most important in accounting for the variation in the response variable (Green and Tull, 1983).

Pretest

The questionnaire was pretested under field conditions with a sample of 192 students enrolled in upper-division business courses at Southeastern Louisiana University in Hammond, Louisiana. These students were selected for use in the pretest due to their similarity to the sample that was used in the research study.

Respondents were observed while completing the questionnaires to determine if difficulties arose at any particular point. Following completion of the questionnaire, subjects were interviewed to obtain their comments, reactions and suggestions. The respondents were questioned concerning the clarity of the instructions, use of the scales, and any other possible ambiguities. No major weaknesses were revealed in the pretest. Thus, no important changes were necessary.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

This chapter is divided into five sections. The first section presents a discussion of the results of the analyses of the effectiveness of the independent variable manipulations. In the second section, the results of the reliability and validity assessments of the scales used in the study to measure subjects' responses are presented.

Sections three and four present the results of the analyses of the effects of the independent variables on subjects' responses. The third section discusses the results concerning corrective actions. This section begins with a discussion of the results concerning the relative effects of ability-related and effort-related performance dimensions on subjects' responses concerning the likelihood of the various corrective actions. This is followed with a discussion of the effects of salesperson sex on corrective actions.

The fourth section discusses the results concerning reward actions and follows the same format used in the previous section. First, the relative effects of ability and effort evaluative criteria on subjects' responses concerning the likelihood of the various reward actions are discussed. Then, a disussion of the effects of salesperson sex on reward actions is presented. Finally, the last section presents a discussion of subsidiary analyses.

Manipulation Checks

Four manipulation checks were conducted. They were designed to assess the effectiveness of the sex, performance level, ability, and effort manipulations. The subjects' ratings on the male-female adjective scale served as the perceived sex measure. An analysis of variance was conducted with the perceived sex measure as the dependent variable and the factors (sex, performance level, and ratings on the ability and effort dimensions) as independent variables. The results verified that the perceptions of sex was successful. A main effect for sex was strongly indicated, $F(1,254) = 1289.8$, $p = .0000$. No other main effects were significant. The mean ratings were 1.53 in the male condition and 8.09 in the female condition. Eta squared indicated that the sex manipulation accounted for 83% of the variance in the perceptions of sex.

Ratings on two scales (successful-unsuccessful and high performer-low performer) were averaged to comprise a measure of perceived performance level. The results of the analysis of the performance level manipulation indicated that subjects perceived salespeople as significantly more successful in the high performance ($M = 6.64$) than low performance ($M = 2.3$) conditions, $F(1,254) = 570.3$, $p = .0000$. The performance manipulation accounted for 69% (eta squared) of the variance in the perceptions of performance level. No other main effects were significant.

The averaged scores on three scales (hard worker-lazy; ambitious-unambitious; reliable-unreliable) served as a measure of the perceptions of effort. The results of the analysis of variance indicated significant main effects for the effort ratings. No other

main effects were significant. Salespeople in the high effort (M = 6.81) conditions were perceived to work significantly harder than salespeople in the low effort (M = 2.40) conditions, $F(1,254) = 668.1$, $p = .000$. Eta squared revealed that the effort manipulation accounted for 84% of the variance in subjects' perceptions of effort.

The ratings on three scales (intellectually capable-intellectually incapable; competent-incompetent; bright-dumb) were averaged to assess perceptions of ability. Analysis of variance revealed a significant main effect for the ability ratings, $F(1,254) = 378.9$, $p = .000$, indicating that the ability manipulation was successful. No other main effects were significant. The mean ratings for salespeople were 5.70 in the high ability condition and 2.42 in the low ability condition. The manipulation of ability accounted for 75% (eta squared) of the variance in the perceptions of ability. These results indicate that the manipulations of the independent variables were effective.

Scale Reliability and Validity

The dependent measure instrument included scales indicative of alternative supervisory actions consisting of both corrective actions for poor performing salespeople and rewarding actions for good performers. The instrument consisted of items for various categories of corrective and rewarding actions. The corrective actions included coercive, nonpunitive, demoting or transferring and no action. The rewarding actions included promotion, bonus or pay increase, transfer to a more lucrative territory and recognition.

Factor analysis was conducted to determine the extent to which the actions rated by the subjects corresponded to the conceptualized

categories of alternative supervisory actions. Corrective and rewarding actions were analyzed separately to identify their component factors.

Criteria used to determine the number of factors were a priori belief that certain factors were present (Hair et.al., 1987), and the Scree Test (Cattell, 1966). The analysis extracted four factors from the corrective action scores and four factors from the rewarding action scores.

The results for the corrective actions are contained in Table 10. The four scales include eleven items. Five items, indicative of coercive actions, loaded significantly on the first factor. Three items loaded significantly on a second factor. The items loading on factor two are representative of nonpunitive actions. Factor three had two items, "do nothing at all" and "take no immediate action," to load significantly. The fourth factor had one item, "transfer salesrep out of the district," that loaded significantly. Loadings of greater than $\pm$.30 are considered significant, with loadings of $\pm$.40 to $\pm$.50 considered as more important (Hair et.al., 1987). As shown in Table 10, the lowest loading for any item on any scale was .72. The factors accounted for 66.7% of the variance in responses for corrective actions.

The inter-item correlations for each construct are also shown in Table 10. These correlations indicate the relationship of the item to the total scale. Items with high values tend to produce internally consistent measures. The inter-item correlations for the corrective action scales range from .49 to .74.

TABLE 10

CORRECTIVE ACTIONS

CORRECTIVE ACTION SCALES	Factor Loadings	Inter-Item Correlations
Coercive Action Scales (alpha = .86)		
Threaten to reduce salary	.83	.73
Threaten to fire salesperson	.80	.74
Deduct a portion of the salesrep's salary	.76	.63
Scold the salesperson	.74	.60
Fire the salesperson	.72	.62
Nonpunitive Action Scales (alpha = .72)		
Encourage the salesrep to improve	.78	.49
Counsel the salesperson	.75	.60
Have a meeting with the salesrep to discuss possible problems	.72	.53
No Action Scale (alpha = .93)		
Do nothing at all	.89	.63
Take no immediate action	.88	.63
Transfer Scale		
Transfer salesrep out of district	.92	

Percent of variation explained = .68

The four factors extracted from the responses on the rewarding action scales are shown in Table 11. The first three factors contain two items each. The items are indicative of recognition (factor one), promotion (factor two), and compensation (factor three) actions. One item, "transfer to a more lucrative territory," loaded on the fourth factor. All of the items loaded significantly on their respective factors. The lowest loading for any item on any scale was .75. The four factors accounted for 91.6% of the variance in responses for rewarding actions. As seen in Table 11, the inter-item correlations for the rewarding action scales have a range of .79 to .91.

The ratings on the items for each type of action were summated and used as dependent measures in assessing the effects of the independent variables in the study. One item, fire the salesperson, was used to assess termination actions.

Reliability. Cronbach's alpha was used to assess the internal consistency of each scale. The results, shown in Table 10 and Table 11, indicate alphas ranging from .72 to .93. Coefficient alpha estimates between .60 and .80 are considered adequate for most research purposes (Nunnally, 1969). On the basis of the reliability assessment, the scales appear to be reliable in terms of internal consistency (homogeneity of items).

Corrective Actions

The effects of the independent variables on the corrective actions were analyzed using multivariate analysis of variance followed by stepdown analyses for each of the corrective action measures. The results of the multivariate analysis revealed significant effects for

TABLE 11

REWARDING ACTIONS

REWARDING ACTION SCALES	Factor Loadings	Inter-Item Correlations
Recognition Scale (alpha = .90)		
Praise the salesperson	.80	.82
Compliment the salesperson	.78	.82
Promotion Scale (alpha = .88)		
Promote the salesperson	.81	.91
Recommend promotion for salesrep	.80	.91
Compensation Scale (alpha = .88)		
Give the salesrep a bonus	.75	.79
Give the salesrep an increase in base pay	.80	.79
Transfer Scale		
Transfer salesperson out of district	.88	

Percent of variation explained = 91.6

performance dimensions, $F(5,244) = 139.1$, $p = .000$, performance level, $F(5,244) = 459.19$, $p = .000$, salesperson sex, $F(5,244) = 10.33$, $p = .000$, and a significant interaction effect for performance dimensions and sex of the salesperson, $F(5,244) = 5.33$, $p = .000$. Wilk's criterion was used for each of the independent variables.

Relative Effects of Ability and Effort

The results of the stepdown analysis for each of the corrective action measures are shown in Table 12 with omega squared estimates for all significant effects. The analysis shows significant effects of performance dimensions for coercive actions ($p<.05$), nonpunitive actions ($p<.05$), termination ($p<.05$), and transfer ($p<.05$). The effects of performance dimensions on no action were not significant.

The means for the corrective action measures are shown in Table 13. Examination of the table provides considerable support for the hypothesized relationships between the performance dimensions and the corrective action ratings.

The first hypothesis predicted that termination would be more likely for salespeople who were rated low on effort-related dimensions than for those rated low on ability-related dimensions. The data in Table 13 show that salespeople rated low on effort were significantly more likely to be fired than salespeople rated low on ability ($p = .000$). This hypothesis was supported.

The second hypothesis proposed that nonpunitive corrective actions would be more likely for salespeople with low ability than for those with low effort. As shown in Table 13, this hypothesis was supported. Nonpunitive actions were significantly more likely to be used for

TABLE 12

SUMMARY OF ANALYSIS OF VARIANCE ON CORRECTIVE ACTION FACTORS

Source	DF	F Ratios				
		Coercive Action	Nonpunitive Action	No Action	Fire	Transfer Out
Performance level	1	359.9*	458.1*	17.7*	72.1*	14.1*
(w2)		(.77)	(.72)		(.31)	(.25)
Performance Dimensions	1	56.4*	150.2*	.01	156.7*	46.9*
(w2)		(.12)	(.24)		(.67)	(.70)
Salesperson Sex	1	41.9*	8.2*	.8	.1	.2
(w2)		(.09)	(.02)			
PDimens by Sex	1	10.9*	8.4*	1.9	3.6*	1.2
(w2)		(.02)	(.02)		(.02)	

* $p<.05$.

Note: w2 (omega squared) indicates the percentage of variation in the response variable accounted for by the factor.

TABLE 13

MEANS FOR THE CORRECTIVE ACTION MEASURES

Corrective Action Measures	Performance Dimensions: Low Ability	Performance Dimensions: Low Effort
Coercive Action	-.19	2.40*
Nonpunitive Action	2.96	.09*
Transfer out of district	2.69	-.31*
No action	-.72	-.72
Termination	-.43	2.99*

*All differences significant, p = .000.

*The scores for each type of action were standardized where the mean = .00 and the standard deviation = 1.00. The possible range of scores on the standardized corrective action measures was +3.00 to -3.00. A higher mean can be interpreted as indicating a greater likelihood of taking a particular action.

salespeople with low ability than for salespeople with low effort ($p = .000$).

The third hypothesis stated that coercive actions would be more likely for salespeople rated low on effort than for those rated low on ability. The data in Table 13 provide support for this hypothesis. As predicted, coercive action scores were significantly higher for salespeople with low effort than those with low ability ($p = .000$).

Hypothesis 4 predicted that salespeople rated low on ability would be more likely to be transferred out of the manager's district than those rated low on effort. The results provide support for this contention. The likelihood of transferring a low performing salesperson out of the district was significantly greater for salespeople with low ability than those with low effort ($p = .000$).

The fifth hypothesis stated that taking no action would be more likely for salespeople rated low on ability than for those rated low on effort. As shown in Table 13, there was not a significant difference between taking no action for low ability and low effort salespeople. This hypothesis was not supported.

Performance Dimension
and Salesperson Sex

The multivariate analysis showed a significant interaction effect for performance dimensions and salesperson sex, $F(5,244) = 5.33$, $p = .000$. Specifically, as indicated by the stepdown analysis, there were significant differences in the ratings for low-ability and low-effort males and females for coercive actions ($p<.05$), nonpunitive actions ($p<.05$) and termination ($p<.05$) (Table 12). The ratings for males and females were not significantly different for transfer. The average ratings are for males and females are shown in Table 14.

TABLE 14

MEANS FOR THE CORRECTIVE ACTION MEASURES

Corrective Action Measures	Performance Dimensions by Salesperson Sex			
	Low Ability		Low Effort	
	Males	Females	Males	Females
Coercive action	.28	-.09	1.89	.50*
Nonpunitive action	1.34	1.62*	.04	.04
Transfer out of district	1.24	1.44	-.02	-.28
Termination	-.21	-.22	1.78	1.21*

*p<.05.

*The scores for each type of action were standardized where the mean = .00 and the standard deviation = 1.00. The possible range of scores on the standardized corrective action measures was +3.00 to -3.00. A higher mean can be interpreted as indicating a greater likelihood of taking a particular action.

Hypothesis 6 predicted that termination would be more likely for males rated low on effort than for females rated low on effort. The findings support this hypothesis. The likelihood of firing a male low on effort was significantly greater than that of firing a female low on effort ($p<.05$).

Hypothesis 7 proposed a significant difference between males with low effort and females with low effort on coercive actions, predicting a greater effect for males with low effort than for females with low effort. As seen in Table 14, this hypothesis received support. Males with low effort were significantly more likely to receive coercive actions for poor performance than were females with low effort ($p<.05$).

Hypothesis 8 stated that nonpunitive corrective actions would be more likely for females with low ability than for males with low ability. Nonpunitive actions were significantly more likely to be used for females with low ability than for males with low ability ($p<.05$). This hypothesis was supported.

Hypothesis 9 predicted that females with low ability were more likely to be transferred out of the district than males with low ability. The results do not provide support for this hypothesis. The data indicate no significant differences between males and females with low ability in terms of transferring out of the district.

Reward Actions

The effects of the independent variables on the rewarding actions were analyzed using a separate multivariate analysis of variance followed by stepdown analyses for the scores representing each of the rewarding actions. The results of the multivariate analysis revealed

significant effects for performance dimensions, $F(4,245) = 18.41$, $p = .000$, performance level, $F(4,245) = 142.42$, $p = .000$, salesperson sex, $F(2,245) = 5.11$, $p = .001$, and the performance dimension by salesperson sex interaction, $F(4,245) = 4.84$, $p = .001$. No other interactions were significant.

Relative Effects of Ability and Effort

Table 15 provides a summary of the results of the stepdown analysis including omega squared estimates for all significant effects. This analysis revealed significant effects for ability and effort on the scores for transfer ($p<.01$) and promotion ($p<.01$). The effects on compensation and recognition were not significant. The means for the rewarding action measures are shown in Table 16.

Hypothesis 10 stated that salespeople with high ability were more likely to be promoted than salespeople with high effort. This hypothesis was supported. The likelihood of promoting a salesperson rated high on ability was significantly greater than for a salesperson rated high on effort ($p<.01$).

Hypothesis 11 proposed that transferring a salesperson to a more lucrative, challenging territory would be more likely for salespeople rated high on ability than for salespeople rated high on effort. Test results for this hypothesis show a significantly greater likelihood of transferring high ability performers than high effort performers to better territories ($p<.01$). This hypothesis was supported.

Hypothesis 12 predicted that there would be no differences in compensating salespeople based on performance dimensions. The data

TABLE 15

SUMMARY OF ANALYSIS OF VARIANCE ON REWARD ACTION FACTORS

Source	DF	F Ratios			
		Promotion	Pay	Recognition	Transfer Better
Performance Level (w2)	1	31.7* (.42)	433.8* (.99)	5.8* (.51)	11.6* (.14)
Performance Dimensions (w2)	1	7.3* (.09)	.6	1.6	61.9* (.79)
Salesperson Sex (w2)	1	16.9* (.22)	1.2	1.0	1.2
PDimens by Sex (w2)	1	15.8* (.21)	1.9	.01	1.5

* $p<.01$.

Note: w2 (omega squared) shows the percentage of variation in the response variable accounted for by the factor.

TABLE 16

MEANS FOR THE REWARDING ACTION MEASURES

Rewarding Action Measures	Performance Dimensions: High Ability	Performance Dimensions: High Effort
Promotion	1.65	1.36*
Compensation	1.40	1.74
Recognition	1.08	1.73
Transfer to a Better Territory	2.57	-.45*

* $p<.01$.

*The scores for each type of action were standardized where the mean = .00 and the standard deviation = 1.00. The possible range of scores on the standardized rewarding action measures was +3.00 to -3.00. A higher mean can be interpreted as indicating a greater likelihood of taking a particular action.

provide support for the hypothesis of no differences in compensation between high ability and high effort performers.

Hypothesis 13 predicted no differences in recognition for high ability and high effort salespeople. The results support this contention. There was no significant difference between high ability and high effort salespeople in terms of receiving recognition for good performances.

Performance Dimensions and Salesperson Sex

The multivariate analysis of variance indicated a significant performance dimension by salesperson sex interaction effect, $F(4,245) = 4.84$, $p = .001$. The stepdown analysis indicated that the ratings for males and females were significantly different for promotion ($p = .000$). There were no other significant differences in the ratings for males and females. Table 17 contains the means for high-ability and high effort males and females.

Hypothesis 14 predicted that a promotion would be more likely for males rated high on ability than for females rated high on ability. The results of the analysis support this hypothesis, showing a significantly greater likelihood of promoting high ability males than high ability females ($p = .000$).

Hypothesis 15 proposed that transfer to a more lucrative territory would be considered more likely for males rated high on ability than for females high on ability. The data do not support this hypothesis. The mean ratings for males and females with high ability are not significantly different.

TABLE 17

MEANS FOR THE REWARDING ACTION MEASURES

Rewarding Action Measures	Performance Dimensions by Sex			
	High Ability		High Effort	
	Males	Females	Males	Females
Promotion	1.26	-.39*	.73	.63
Compensation	.78	.62	.86	.88
Recognition	.63	.45	.86	.87
Transfer to Better Territory	1.33	1.24	-.26	-.18

*p = .000.

*The scores for each type of action were standardized where the mean = .00 and the standard deviation = 1.00. The possible range of scores on the standardized rewarding action measures was +3.00 to -3.00. A higher mean can be interpreted as indicating a greater likelihood of taking a particular action.

Hypothesis 16 predicted that there would be no sex differences in compensation decisions. The effect of salesperson sex on compensation scores were not significant. Table 18 shows that the mean ratings were 1.64 for males and 1.51 for females. This hypothesis was supported.

Hypothesis 17 stated that there would be no sex differences in recognition. This hypothesis was supported. Salesperson sex had no significant effect on recognition. As indicated in Table 18, the average ratings were 1.49 for males and 1.32 for females.

Summary of Research Findings

Tables 19 and 20 provide a summary of the research hypotheses and related findings. Table 19 shows the hypothesized relationships and findings concerning ability, effort, salesperson sex and corrective actions. The hypothesized relationships and findings concerning ability, effort, salesperson sex and rewarding actions are shown in Table 20.

Subsidiary Analysis

The analysis of the data revealed several significant relationships that were not hypothesized. As shown in Table 12, salesperson sex had a significant effect on both the coercive and nonpunitive corrective action scores. Males ($M = 2.17$) were significantly more likely to receive coercive actions for poor performance than were females ($M = .42$), $p<.05$. In contrast, females were significantly more likely to be treated nonpunitively for poor performance than were males. The mean ratings were 1.38 for males and 1.64 for females ($p<.05$).

TABLE 18

MEANS FOR THE REWARDING ACTION MEASURES

Rewarding Action Measures	Salesperson Sex	
	Males	Females
Compensation	1.64	1.51
Recognition	1.49	1.32

* No significant differences.

*The scores for each type of action was standardized where the mean = .00 and the standard deviation = 1.00. The possible range of scores on the standardized action measures was +3.00 to -3.00. The higher the mean, the more likely the action.

Table 19

SUMMARY OF RESULTS AND HYPOTHESIZED RELATIONSHIPS BETWEEN ABILITY, EFFORT, SALESPERSON SEX, AND CORRECTIVE ACTIONS

	Corrective Action	Predicted	Results
Hypothesis 1	Termination	Low Effort	Supported (p=.000)
Hypothesis 2	Nonpunitive	Low Ability	Supported (p=.000)
Hypothesis 3	Coercive	Low Effort	Supported (p=.000)
Hypothesis 4	Transfer Out	Low Ability	Supported (p=.000)
Hypothesis 5	No Action	Low Ability	Not Supported
Hypothesis 6	Termination	Low Effort Males	Supported (p<.05)
Hypothesis 7	Coercive	Low Effort Males	Supported (p<.05)
Hypothesis 8	Nonpunitive	Low Ability Females	Supported (p<.05)
Hypothesis 9	Transfer Out	Low Ability Females	Not supported

Table 20

SUMMARY OF RESULTS AND HYPOTHESIZED RELATIONSHIPS BETWEEN ABILITY, EFFORT, SALESPERSON SEX, AND REWARDING ACTIONS

	Rewarding Action	Predicted	Results
Hypothesis 10	Promotion	High Ability	Supported ($p<.01$)
Hypothesis 11	Transfer Up	High Ability	Supported ($p<.01$)
Hypothesis 12	Compensation	No Significant Differences	Supported
Hypothesis 13	Recognition	No Significant Differences	Supported
Hypothesis 14	Promotion	High Ability Males	Supported ($p=.000$)
Hypothesis 15	Transfer Up	High Ability Males	Not Supported
Hypothesis 16	Compensation	No Significant Differences	Supported
Hypothesis 17	Recognition	No Significant Differences	Supported

Significant salesperson sex effects were also found for promotion (Table 15). Males (M = 2.0) were significantly more likely to be promoted than were females (M = 1.0) ($p<.01$).

As might be expected, Tables 12 and 15 indicate that performance level had a significant effect on corrective and rewards actions. Except for transfer to a better territory, transfer out of the district, and termination, performance level accounted for most of the variation in responses.

Subject sex. Analysis of variance was performed on the action measures to assess the effects of subject sex on responses. The only significant effect was on termination scores. Both male and female subjects were significantly more likely to fire males (M = 2.30) than females (M = .99), $p<.10$.

Rankings. Subjects were asked to make several additional decisions concerning the five salespeople. They were asked to rank the salespeople from best (1) to worst (5), to select one of the five salespeople for retention, to select one of the salespeople for termination, and to allocate $15,000 in bonus money among the five salespeople in any manner they wished. Analysis of the data revealed no significant sex differences in responses, so the data were pooled within each performance dimension for analysis. The subjects' evaluative decisions are summarized in Table 21.

From examination of the data, it is apparent that effort generated the most extreme reactions from the subjects. The majority (71%) of the subjects judged the salespeople with high effort as best ($p<.001$). Most of the subjects selected the high effort salespeople for retention (76%) ($p<.001$) and the low effort salespeople for termination (76%)

TABLE 21

SUBJECTS' EVALUATION OF SALESPEOPLE

Salesperson's Ratings on Performance Dimension	Mean Rank*	Proportion Choosing: As Best	As Worst	To Retain	To Fire	Mean Bonus Awarded
High Effort	1.30	.71	.8	.76	.00	$5,886
High Ability	1.84	.23	.00	.22	.00	2,802
Low Ability	4.17	.00	.24	.00	.22	1,112
Low Effort	4.71	.8	.71	.00	.76	853
Probability	.0000[a]	.001[b]	.001[b]	.001[b]	.001[b]	.0000[a]

*Rankings coded 1 = best, 5 = worst.

[a] Probabilities generated from Friedman analysis of variance for related samples.

[b] Probabilities generated from Chi-square goodness of fit.

Coefficient of concordance = .89, p =.000.

($p<.001$). In addition, high effort salespeople were awarded the highest average amount of bonus money ($5,886). The coefficient of concordance (.89) indicates the high degree of agreement among subjects concerning the rankings.

Summary of Chapter IV

This chapter presented the results of the study. First the analyses concerning the effectiveness of the independent variables manipulations were discussed. This was followed by a discussion concerning the reliability and validity assessments of the dependent measures instrument. The results of the analyses of the effects of the independent variables on subjects' responses were then presented. Finally, the discussion focused on subsidiary analyses.

The next chapter contains a discussion of the research conclusions and implications. Included in Chapter 5 are a number of suggestions for future research.

CHAPTER V

RESEARCH CONCLUSIONS AND IMPLICATIONS

Introduction

This chapter is divided into three sections. The first section presents a discussion of the research findings. Next, the conclusions and implications are discussed. Finally, suggestions for future research are presented.

Discussion of Research Results

The present study provides support for the hypothesis that a salesperson's ratings on performance dimensions have a significant influence on subjects' decisions concerning actions to be taken with regard to the salesperson. When a salesperson's performance is characterized as below average, the most coercive corrective actions are likely to be taken when the poor performance appears to be due to a lack of effort. The punitive nature of corrective actions directed toward low effort salespeople is underscored by the finding that 76% of the subjects selected the salesperson with low effort to fire while only 22% of the subjects selected the salesperson with low ability for termination.

Salespeople who perform poorly because of lack of ability are likely to be treated less harshly. Subjects indicated that positive corrective actions such as counseling and offering encouragement to the salesperson were more likely when salespeople performed poorly because

of lack of ability. The data suggest that the preferred method of "disposing" of salespeople with low ability who perform poorly would likely be to transfer the salesrep out of the district rather than firing.

The lack of significance for taking no action may be because subjects did not view it as an appropriate method of dealing with salespersons' poor performance. This is corroborated by the low and identical means for ability (M = -.72) and effort (M = -.72).

The results on rewarding actions support the contention that good performance is likely to be rewarded through compensation and recognition regardless of "why" the salesperson succeeded. Subjects indicated that they were equally likely to compliment and to give bonuses to good performers with high ability and those with high effort. However, when allocating bonus money, subjects awarded salespeople with high effort a higher average bonus than salespeople with high ability. Ratings on performance dimensions appear to influence the level of compensation allocated rather than the decision whether to compensate.

Although subjects selected the high effort salesperson as best and allocated him/her the largest average bonus, promotion and transfer to a more lucrative territory were reserved for high ability salespeople. This finding was not unexpected and is consistent with the findings of other studies (e.g., Heilman and Guzzo, 1978; Pazy, 1986). These findings lend support to the contention that the relative importance of performance dimensions vary depending on the decision being made.

The analysis indicated that subjects were more likely to treat poor performing males more punitively than poor performing females. As

in the Pence et.al. study (1982), subjects indicated that they were more likely to fire and use coercive corrective actions toward males than females. Nonpunitive corrective actions were more likely for females. Both male and female subjects demonstrated this "bias."

As expected, there were no sex differences in compensation or recognition decisions. However, consistent with previous research (Pazy, 1986), males were more likely to be promoted than were females.

Unexpectedly, there were no significant sex effects on transfer to a more lucrative territory. It was expected that males with high ability would be more likely to be transferred to better territories than females with high ability. The hypothesis was based on the logic that this decision is analogous to a promotion decision and the same sex effects should obtain. Salesperson sex did not have a significant effect on transfer out of the district although it was believed to be more likely for females with low ability than for males with low ability since this action represents a more positive way of dealing with poor performers. Although this study used mixed-sex groups, no condition provided for a direct comparison of females and males rated the same (i.e., both rated high or both rated low) on the same performance dimension. That type of comparison was avoided because it was believed that it might make the sex manipulation too salient. However, not providing the opportunity for such a comparison may have had an effect on the results. This is particularly true with regard to the rankings and the evaluative decisions concerning retention and termination.

The results with regard to the rankings and evaluative decisions have some important implications. Subjects were not given the

opportunity to choose between a male and a female who were rated the same on the same criteria. They were given the opportunity, however, to base their decisions on sex or the performance criteria. As the results show, these decisions were based exclusively on ratings on the performance dimensions.

Conclusions and Implications

From a theoretical perspective, the results provide support for the development of cognitive models of performance appraisal. Cognitive models represent a departure from the traditional psychometric approach to improving the accuracy of performance evaluations. Rather than focusing on improving evaluation instruments, cognitive models focus on improving evaluations through an understanding of the information processes of evaluators and the factors that influence those processes.

The present study demonstrated the applicability of this approach to sales force evaluation. The performance criteria on the rating instrument and the type of decision under consideration were shown to have an influence on evaluation decisions. The type of decision being made appears to affect the degree of influence of the performance criteria. Decisions that require absolute judgments are not significantly influenced by performance criteria. These decisions are more likely to be based on the salesperson's overall performance. Decisions that require behavioral predictions are influenced by performance criteria and the relative influence of performance dimensions becomes more evident with these decisions.

Although the present study was not based on attribution theory, the findings of the study, in terms of the relative importance of the performance dimensions, are compatible with predictions from attribution theory. Attribution theory postulates that the perceived causes for a particular performance mediate the performance and subsequent responses. As applied to this study, the performance dimensions on the rating instrument can be conceptualized as predetermined causes for performance. The manager's ratings on these performance dimensions can be viewed as attributions to cause. Because the "causes" and the "attributions" used in this study were predetermined, attribution theory was not used as the theoretical framework.

Causes vary along three dimensions: locus of causality (internal/ external), stability (stable/unstable), and locus of control (controllable/ uncontrollable)(Weiner, 1980). The "causes" used in the present study are both internal. Thus, they vary only in terms of stability and controllability. It is the controllability of the cause that affects evaluations (Weiner, 1980). To the extent that effort is perceived as more controllable than ability, it is the primary determinant of evaluations (Weiner, Russell, and Lerman, 1978). In this context, the salesperson would be perceived as more personally responsible for the performance outcome when success or failure is attributed to effort. Thus, given poor performance, lack of effort receives greater disapproval than lack of ability. Given high performance, high effort receives greater approval than high ability. The findings of this study are consistent with these propositions. Specifically, coercive, punitive actions were considered more

appropriate for poor performance due to lack of effort. Similarly, the level of bonuses allocated was higher for good performance due to high effort.

When decisions involve expectancies of future performance, the stability of the cause has the greatest influence (Weiner, 1979). Success attributed to a stable factor leads to higher expectancies of future success while failure attributed to a stable factor leads to lower expectancies of future success. Thus, the stability of the cause governs the decision when performance reliability is a crucial consideration. To the extent that ability is perceived as more stable than effort, it is the primary determinant of such decisions. The results of the study indicate that the salesperson with high ability and good performance is more likely to be granted a promotion and transfer to a more lucrative territory.

If the findings of this study extend to actual salesperson evaluations, they have important implications for sales managers. Rewards and corrective actions may be inappropriately allocated which could lead to perceptions of inequities and problems of role ambiguity and dissatisfaction among members of the sales force. Role ambiguity, as well as perceived inequities in the distribution of rewards and sanctions, have been shown to have negative effects on salesperson productivity (e.g., Tyagi, 1985a; Behrman & Perreault, 1984). Sales managers should avoid the tendency to overreact to effort, given success or poor performance.

Sales managers also should give careful attention to the motivational techniques used to improve the performances of salespeople who are perceived to have average ability but exert insufficient

effort. This same caveat applies to the differential treatment of poor performing males and females.

When rewards are justifiably based on the salesperson's performance on particular performance criteria, the relationship between the evaluative criteria and the reward should be communicated to members of the sales force. This not only will provide a clearer understanding of how evaluative decisions are reached but also will enable the sales manager to more easily defend his decisions.

Keeping in mind the limitations of the present study, a few general conclusions can be offered. It appears, for example, that one of the most significant determinants of the use of corrective and reward actions is the performance levels of the salespeople. Consistent with what one might hope to be the case, evaluators tend to allocate rewards to those who perform well and to punish those who do not.

The results also suggest that ratings on ability and effort criteria play a significant role in determining actions concerning salesperson performance. Poor performance is punished more when it is perceived to result from lack of effort rather than lack of ability. On the other hand, nonpunitive corrective actions are more likely to be used when poor performance is perceived to result from lack of ability rather than lack of effort.

Although good performance resulting from either high ability or high effort is likely to be rewarded, the level of the reward is higher when the performance is perceived to result from effort. In addition, promotions are more likely to be given to good performers with high ability.

There was some evidence of differential treatment of male and female salespeople. Males may be treated more punitively for poor performance than females but may be more likely to receive promotions than females. However, the results of the study suggest that ratings on performance dimensions have a greater influence on reactions to salesperson performance than salesperson sex.

Overall, the results of the study indicate that investigations of the effects of performance criteria on reactions to salesperson performance might be worthwhile. The following section offers several suggestions for future research.

Directions for Future Research

A major limitation of this study is that results were obtained using undergraduate students in a laboratory setting. Generalization of laboratory results to actual organizational settings should be done with caution. However, laboratory studies can enhance the understanding of behavior relevant to actual organizations (Dipboye and Flanagan, 1979; Wendelken and Inn, 1981). This is particularly true when, as with the present study, the research focuses upon basic cognitive processes which may be operative in actual evaluations. The evaluative processes should retain a certain degree of commonality whether they occur in the laboratory setting or in actual organizations. Nevertheless, these conditions should be replicated using actual sales managers.

Future studies on performance evaluation might assess the effects of performance criteria using sales jobs which differ in terms of level of challenge and responsibility. The present study involved computer

sales which involve high degrees of both. Different results may be obtained with different types of sales jobs.

Ability and effort are important factors affecting salesperson performance. However, other factors could be considered. Mowen and his colleagues have conducted studies comparing the relative effects of effort and task difficulty on evaluations. Future reseach might consider incorporating ability, effort, and task difficulty into one study to assess their relative effects.

Although subjects were provided with comparative data, they made decisions concerning only one of the salespeople. Different results might be obtained if subjects made decisions about several salespeople. A repeated measures design in which several salespeople are assessed may be the next logical step.

Other factors inherent in the design of the study limit its generalizability to sales organizations. The sales manager's evaluation depends in part on the performance of his sales force. Thus, he is highly involved in the evaluation process. Although efforts were made to involve subjects in the decision making, the level of involvement might have affected the results.

It is also possible that the results of the study may have been influenced by the number and selection of attributes representing ability and effort. Expanding the number and/or selection of attributes defining each performance dimension might be considered.

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Appendix A

Verbal Instructions:

The purpose of this study is to see how people make various personnel judgments and decisions on the basis of limited information.

You will be provided with information concerning the performances of five computer sales representatives. The performance evaluations were taken from the actual personnel files of the computer sales representatives. They were evaluated by their immediate sales manager. The set of performance ratings for each salesperson that you will review represents only a portion of their total file.

You will be asked to assume the position of the regional sales manager and to make decisions concerning one of the five sales reps on the basis of that salesperson's performance ratings, in comparison with the ratings of the other four salespeople.

To give you some indication of what is required of a computer sales representative, I have taken some information from the company's recruiting brochure and official job description. These particular salespeople sell both small and large computer systems. If often takes three to six months to sell the small systems and as long as a year to close a deal for a large system. During this time, the salesperson is competing with at least three other sales reps from other companies. So the job requires a great deal of perseverance and energy.

In addition, the sales reps must know in depth the capabilities of the products and systems they recommend; they must know their customer's business if their recommendations are to carry any weight; they must be able to demonstrate our products, emphasizing salable

features, such as flexibility, cost, capacity, and economy of operations; they must be able to consult with staff engineers on highly technical problems; and they must travel throughout an assigned territory to call on regular and prospective customers to solicit orders.

There are no right or wrong answers. I am only interested in your opinions as the sales rep's employer. Remember, these are your employees and their performances have a direct bearing on your own evaluation and compensation.

INSTRUCTIONS:

You are the regional sales manager for a mid-sized computer firm. You have a total of ten sales representatives working for you. In the following pages, you will receive information on the performance of five of your salespeople.

They have been evaluated for their performances for the last six months. During the evaluation period, there were no new products or technological developments introduced. All five of the sales representatives have college degrees, have completed the company's training program, and have worked for your company for five years.

You are in the process of making decisions about only one of the five sales reps. The information given on the other four is provided for comparison purposes only.

Each of the salespeople has been judged on his/her performance on seven performance dimensions, such as product knowledge. On the next page you will find a list of the seven dimensions, their definitions, and an explanation of the rating procedure used to evaluate the five sales reps. You will then find, on the following page, five sets of ratings, one for each of the salespeople.

Finally, you will find two pages of questions. Once you have reviewed the performance ratings for each of the sales reps, you will be asked to answer questions in response to the performance of . The performance ratings for the other four salespeople are for comparison purposes only.

DESCRIPTION OF RATING SCALE

A sales manager has evaluated five members of his sales force. Each of the members of the sales force has been judged on the following seven job dimensions.

Product Knowledge:	Demonstrated knowledge of the products' characteristics, uses, advantages, applications, etc.
Selling skills:	Demonstrated ability to present and demonstrate the products' features, advantages, and benefits to the customer, to handle objections, to close the sale and to direct the presentation to the needs of the customers.
Technical skills:	Demonstrated knowledge of technical aspects of the products; knowledge of technical problems involved in their application; ability to communicate with staff engineers.
Level of effort:	The amount of time and effort the salesperson devotes to the job; calling on customers, servicing accounts, preparing presentations, etc.
Initiative/ Aggressiveness:	Demonstrated self-reliance and self-motivation; the salesperson's willingness to take the lead, accept responsibility, and originate solutions to problems.
Attitude:	Demonstrated interest in the job; enthusiasm toward work.

Each of the salespersons was rated on each of the above criteria using a one-to-ten scale, with one being extremely poor performance, far below average, five being about average performance, and ten being outstanding, far above average. For example, the rating of a salesperson who was slightly better than the average in appearance would be evaluated on that characteristic as follows:

Far Worse Than Average				Average				Far Better Than Average	
1	2	3	4	5	(6)	7	8	9	10

Thus. the salesperson would earn a score of 6 in appearance for being slightly better than average. A salesperson who was considerably better than average and close to being outstanding might earn a 9, while a salesperson who was considerably worse than the average salesperson might earn a 2 or 3.

The results of the sales manager's ratings of each of the salespersons on each of the characteristics are shown on the next page. Please study them carefully and place yourself in the regional sales manager's position to answer the following questions. Remember, your responses concern only .

EVALUATION OF SALESPERSONS

Salesperson	Evaluation Criteria	Rating									
		Far Worse Than Average									Far Better Than Average
BETTY	Product knowledge	1	2	3	4	5	6	7	8	9	10
	Initiative	1	2	3	4	5	6	7	8	9	10
	Selling skills	1	2	3	4	5	6	7	8	9	10
	Level of effort	1	2	3	4	5	6	7	8	9	10
	Technical skills	1	2	3	4	5	6	7	8	9	10
	Attitude	1	2	3	4	5	6	7	8	9	10
	Sales volume	1	2	3	4	5	6	7	8	9	10
JACK	Product knowledge	1	2	3	4	5	6	7	8	9	10
	Initiative	1	2	3	4	5	6	7	8	9	10
	Selling skills	1	2	3	4	5	6	7	8	9	10
	Level of effort	1	2	3	4	5	6	7	8	9	10
	Technical skills	1	2	3	4	5	6	7	8	9	10
	Attitude	1	2	3	4	5	6	7	8	9	10
	Sales volume	1	2	3	4	5	6	7	8	9	10
MARY	Product knowledge	1	2	3	4	5	6	7	8	9	10
	Initiative	1	2	3	4	5	6	7	8	9	10
	Selling skills	1	2	3	4	5	6	7	8	9	10
	Level of effort	1	2	3	4	5	6	7	8	9	10
	Technical skills	1	2	3	4	5	6	7	8	9	10
	Attitude	1	2	3	4	5	6	7	8	9	10
	Sales volume	1	2	3	4	5	6	7	8	9	10
BOB	Product knowledge	1	2	3	4	5	6	7	8	9	10
	Initiative	1	2	3	4	5	6	7	8	9	10
	Selling skills	1	2	3	4	5	6	7	8	9	10
	Level of effort	1	2	3	4	5	6	7	8	9	10
	Technical skills	1	2	3	4	5	6	7	8	9	10
	Attitude	1	2	3	4	5	6	7	8	9	10
	Sales volume	1	2	3	4	5	6	7	8	9	10
JAMES	Product knowledge	1	2	3	4	5	6	7	8	9	10
	Initiative	1	2	3	4	5	6	7	8	9	10
	Selling skills	1	2	3	4	5	6	7	8	9	10
	Level of effort	1	2	3	4	5	6	7	8	9	10
	Technical skills	1	2	3	4	5	6	7	8	9	10
	Attitude	1	2	3	4	5	6	7	8	9	10
	Sales volume	1	2	3	4	5	6	7	8	9	10

INSTRUCTIONS:

Listed on the following page is a number of possible actions that a sales manager could take in response to a salesperson's performance. As the regional sales manager, you must decide how you would respond to performance. For each of the actions listed, indicate the likelihood of your taking that action by circling the appropriate number on the scale. If it is extremely unlikely that you would take a particular action, you should circle 1 or 2; if the chances are about average that you would take a particular action, you would circle 5; and if it is extremely likely that you would take a particular action, you would circle 8 or 9.

For example, if the chances are slightly above average that you would "take no action" toward the salesperson, you would circle a 6 as follows:

	Very Unlikely								Very Likely
Take no action	1	2	3	4	5	(6)	7	8	9

REMEMBER, YOU ARE RESPONDING TO PERFORMANCE.

		Very Unlikely								Very Likely
1.	Work with the salesperson to improve performance	1	2	3	4	5	6	7	8	9
2.	Threaten to fire the salesperson	1	2	3	4	5	6	7	8	9
3.	Give salesperson a bonus	1	2	3	4	5	6	7	8	9
4.	Demote sales rep to less demanding job	1	2	3	4	5	6	7	8	9
5.	Praise the salesperson	1	2	3	4	5	6	7	8	9
6.	Do nothing at all	1	2	3	4	5	6	7	8	9
7.	Recommend the sales rep for promotion	1	2	3	4	5	6	7	8	9
8.	Recommend additional training for the salesperson	1	2	3	4	5	6	7	8	9
9.	Give salesperson an increase in base salary	1	2	3	4	5	6	7	8	9
10.	Threaten the sales rep with a reduction in salary	1	2	3	4	5	6	7	8	9
11.	Give salesperson three to six months to improve performance or lose job	1	2	3	4	5	6	7	8	9
12.	Have a friendly meeting with salesperson to discuss possible problems	1	2	3	4	5	6	7	8	9
13.	Deduct a portion of the sales rep's salary	1	2	3	4	5	6	7	8	9
14.	Fire the salesperson	1	2	3	4	5	6	7	8	9
15.	Transfer the salesperson to a territory outside your district	1	2	3	4	5	6	7	8	9
16.	Compliment the salesperson	1	2	3	4	5	6	7	8	9
17.	Counsel with salesperson about performance	1	2	3	4	5	6	7	8	9
18.	Scold (fuss at) the salesperson	1	2	3	4	5	6	7	8	9
19.	Send salesperson for additional training	1	2	3	4	5	6	7	8	9
20.	Promote the sales rep	1	2	3	4	5	6	7	8	9

	Very Unlikely								Very Likely
21. Give the salesperson clear recognition for good performance	1	2	3	4	5	6	7	8	9
22. Take no action	1	2	3	4	5	6	7	8	9
23. Offer encouragement to improve performance	1	2	3	4	5	6	7	8	9
24. Transfer the salesperson to a more lucrative, challenging territory within your district	1	2	3	4	5	6	7	8	9
25. Promise the salesperson a bonus if performance improves	1	2	3	4	5	6	7	8	9

INSTRUCTIONS:

On the basis of performance, please indicate how well each of the following adjectives describes him, by circling the appropriate number on each of the following scales. For example, if you believe that could be described as extremely reliable, you would circle 1 or 2; if you believe that could be described as average in reliability, you would circle 5; if you believe that is extremely unreliable, you would circle 8 or 9.

competitive	1	2	3	4	5	6	7	8	9	uncompetitive
foolish	1	2	3	4	5	6	7	8	9	clever
friendly	1	2	3	4	5	6	7	8	9	unfriendly
bold	1	2	3	4	5	6	7	8	9	timid
high performer	1	2	3	4	5	6	7	8	9	low performer
good	1	2	3	4	5	6	7	8	9	bad
reliable	1	2	3	4	5	6	7	8	9	unreliable
successful	1	2	3	4	5	6	7	8	9	unsuccessful
responsible	1	2	3	4	5	6	7	8	9	irresponsible

confident	1	2	3	4	5	6	7	8	9	not confident
likable	1	2	3	4	5	6	7	8	9	unlikable
aggressive	1	2	3	4	5	6	7	8	9	unaggressive
bright	1	2	3	4	5	6	7	8	9	dumb
soft	1	2	3	4	5	6	7	8	9	tough
hard worker	1	2	3	4	5	6	7	8	9	lazy
effective	1	2	3	4	5	6	7	8	9	ineffective
pleasing	1	2	3	4	5	6	7	8	9	upsetting
ambitious	1	2	3	4	5	6	7	8	9	unambitious
competent	1	2	3	4	5	6	7	8	9	incompetent
dominant	1	2	3	4	5	6	7	8	9	submissive
intellectually incapable	1	2	3	4	5	6	7	8	9	intellectually capable
male	1	2	3	4	5	6	7	8	9	female

Instructions:

Again, carefully study the set of performance evaluations. Based on your analysis of the manager's ratings of the salespeople, please answer the following questions.

---

1. If you could retain only one of the five salespeople to work for you, which one would you select? Indicate your choice by placing a check in the space beside the salesperson's name.

   _____ Betty

   _____ Jack

   _____ Mary

   _____ Bob

   _____ James

2. If you had to reduce the sales force by one, which salesperson would you fire?

_____ Betty

_____ Jack

_____ Mary

_____ Bob

_____ James

3. If you had $15,000 in bonus money, how would you distribute it among the five salespeople? You may allocate the $15,000 in any manner you wish as long as the total is exactly $15,000. Place the amount that you would give to each salesperson in the blank beside that rep's name.

_____ Betty

_____ Jack

_____ Mary

_____ Bob

_____ James

4. Please rank the salespeople from best to worst by placing a 1 in the space by the one you think is the best, a 2 by the one you think is the second best and so on through giving a 5 to the one you think is worst.

_____ Betty

_____ Jack

_____ Mary

_____ Bob

_____ James

Instructions:

Please answer the following questions concerning yourself by placing a check in the appropriate blank.

Classification: _____ Freshman

_____ Sophomore

_____ Junior

_____ Senior

_____ Graduate

Age: _____ 18 or under

_____ 19-21

_____ 22-24

_____ 25 or over

Sex: _____ Male

_____ Female

Major: _____

How many business courses have you taken? _____

How many marketing courses have you taken? _____

VITA

Sandra E. McKay was born on October 11, 1940, in Alexandria, Louisiana. She later moved to Monroe, Louisiana, where she graduated from Ouachita High School. She received a B.S. degree from Northeast Louisiana University, with a major in Business Education and a minor in English. In 1965, she received a M.Ed. from Northeast Louisiana University, majoring in Business.

She taught for a number of years at the high school level in Monroe, Louisiana. In 1963, she was chosen as Outstanding Young Teacher in Ouachita Parish. From 1968-1972, she taught at Northeast Louisiana University in Monroe, Louisiana. During this time, she was involved in several professional presentations. In 1969, she was listed in Outstanding Young Women of Louisiana and, in 1971, she was among the Outstanding Young Women of America.

In 1972, she began work on the Ph.D. in Business Administration at Louisiana State University, majoring in Marketing and minoring in Sociology. As a graduate student, she taught Consumer Behavior, made a number of academic presentations, and co-authored one article.

She joined the faculty at Southeastern Louisiana University in 1976, where she taught Consumer Behavior, Sales Management, and Buyer-Seller Communications. While at Southeastern, she co-authored a number of articles and made several academic presentations.

In 1983, she re-entered the Ph.D. program at Louisiana State University and, in 1988, she became a candidate for the Doctor of Philosophy degree in Business Administration.

DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Sandra Edwards McKay

Major Field: Business Administration

Title of Dissertation: The Relative Effects of Salespersons' Ratings on Ability and Effort Criteria

Approved:

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

Date of Examination:

July 12, 1988